INTRODUCTION

Fabrizio Balassone, Daniele Franco and Stefania Zotteri[*]

Public debt has long been at the centre of the fiscal policy debate.

Public borrowing is a powerful tool of economic policy. Via borrowing governments can affect the allocation of resources, economic activity and the distribution of income and wealth. Governments can use borrowing to meet exceptional events, to counter economic downturns and to expand infrastructures.

On the other hand, the misuse of public borrowing can have significant and long-lasting implications. The stock of public debt influences economic decisions and expectations. It constraints the room for manoeuvre of fiscal policy. It can require painful adjustments or it can cause inflation or default.

This dichotomy has prompted a long debate on the role and the limits of public debt. Economists, philosophers and policy makers have highlighted many, sometimes radically different, views. The debate has reflected the diverging opinions concerning the role of the state, the objectives of policy makers and the effectiveness of fiscal policy. While taking different nuances over time, it has also shown a number of constant features.

The debate on public debt has been shaped by different experiences concerning its use in policy making. History has seen numerous episodes of debt accumulation driven by different economic and political factors. Debt decumulation via consolidation, inflation or default has frequently proved economically problematic and has produced significant political consequences.

The papers collected in this volume consider the main strands of the current debate on public debt. Some papers explore the issue of the definition of public liabilities. They highlight the complexity of the issue, especially in view of the assessment of fiscal sustainability and the introduction of formal fiscal rules. Some papers evaluate the role of public debt in emerging market economies. They point to the specific problems raised by debt accumulation in these countries. Some papers examine the role of public debt in the design of fiscal rules, particularly in the EU context. They also consider the relation between deficits and interest rates and evaluate the possibility to ensure fiscal discipline via market mechanisms. Some papers examine the interaction between public debt and demographic ageing. They point to the need to consider the long-term implications of current policies and to the constraint posed by high debt ratios. Finally, some papers examine debt management. They highlight the trade-offs between different objectives and the progress in the techniques.

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[*] Bank of Italy, Research Department.
E-mail: FBalassone@imf.org, daniele.franco@bancaditalia.it, stefania.zotteri@bancaditalia.it

The papers presented at the workshop were allocated in four sessions which are mirrored by the sections in this volume. Section 1 examines the definition and measurement of public debt. Section 2 considers the role of public debt in the design of fiscal rules. Section 3 examines debt in the context of demographic ageing. Section 4 deals with public debt management.

The introductory paper provides a concise overview of the main issues in the debate over public debt. After reviewing the reasons for debt from different analytical perspectives, the paper turns to the definition and assessment of debt sustainability and discusses the implications of high debt levels for the macroeconomic performance of the economy. The final part of the introductory paper considers market-based and rule-based mechanisms to control debt growth and examines the issues arising in the measurement of public liabilities as well as the implications of fiscal rules for debt management.

1. Assessing public liabilities

The papers in Section 1 address the twin issues of which indicators and which methods should be used to assess the sustainability of public debt. They do so from very different perspectives, ranging from the effectiveness of fiscal rules and of the policy making process in general, to the specifics of emerging markets and to the role of government assets.

Milesi-Ferretti and Moriyama use a balance sheet approach to evaluate to what degree changes in the size of gross public debt in EU countries reflect corresponding changes in holdings of government assets or underlying increases in net worth. They describe a number of fiscal measures that improved the fiscal accounts subject to the Maastricht criteria but with no durable impact on public finances as a whole. They find that the correlation between changes in government liabilities and changes in government assets was positive and strong over 1992-97 and that it weakened over 1997-2002. They point out that this is consistent with the notion that up to1997 governments contained the rise in the public debt ratio (or reduced it) also by decumulating government assets, regardless of the impact on net worth, in order to comply with Maastricht fiscal criteria. This effect waned over 1997-2002 once the consequences of resilient debt-to-GDP ratios became less punishing.

Clavijo Vergara analyses the dynamics of Colombia's public and external debt over the period 1997-2003. He argues that a proper assessment of debt sustainability requires that the cost of serving the debt is computed on a gross basis (*i.e.* including the interest payments on intra-governmental debt) and that contingent liabilities, like pension obligations and public guarantees, are taken into account. He remarks that, in spite of the pressure from both international organisations and market players, these two conditions are not usually met. He finds this particularly worrisome in the light of recent evidence which shows that recognition of contingent liabilities in emerging markets, along with interest rates and exchange rate developments, accounts for the bulk of public debt deterioration.

The paper by Gjersem notes that in Norway revenues from the petroleum sector have reached their peak and will slowly dwindle over the coming decades while, at the same time, population ageing will put an upward pressure on pension and health care costs (as in most other OECD countries). Against this background, the author examines the case for pre-funding and saving in the Norwegian public sector and discusses the working of the Petroleum Fund. The latter was established in 1990 to enhance the transparency of the spending of petroleum revenues and to finance the accumulation of assets to be used to meet long-term challenges related to demographic development. Gjersem describes the structure of the Fund, its investments and financial results.

Daniel, Callen, Terrones, Debrun and Allard apply a number of different approaches to assess fiscal sustainability in emerging markets. Their analysis suggests that for these countries the sustainable level of public debt is often quite low. They discuss the heavy policy agenda that confronts policies to reduce public debt and to cushion against the risks that high debt presents. These policies include: a) reforms to strengthen and broaden the tax base; b) better control of expenditures during economic upswings; c) improving the credibility of fiscal policy; d) reducing exposure to exchange rate and interest rate movements; e) structural reforms to boost growth prospects; f) addressing the risks from contingent and implicit liabilities.

Martner and Tromben argue that in Latin American countries the threats to debt sustainability originate in the pro-cyclical bias of fiscal policies. The threats are reinforced by the difficulty that these countries experience in borrowing with long-term maturity domestically or in borrowing in national currency on international markets. This double mismatch (in terms of maturity and of currency) intensifies the uncertainty of public debt service, thus lowering credit ratings and further increasing the cost of debt (also via exchange rate depreciation). In these circumstances, if the reaction of fiscal policy is not timely and quantitatively adequate (*i.e.* if debt-stabilising fiscal primary surpluses cannot be generated in the short term), the debt can take an unsustainable path. Martner and Tromben also discuss proposals advanced in the literature that may lessen these problems.

Rial and Vicente argue that in the case of a small emerging economy facing recurrent shocks of significant magnitude, the analysis of fiscal sustainability cannot be based on the dynamics of the debt level only. The structure of debt by currency, interest rate, maturity, type of instrument, etc. is most important. Using indicators that quantify and evaluate the risks related to the debt structure, they show that in Uruguay, in spite of the low levels of debt-to-GDP ratio observed at the beginning of the Nineties, vulnerability to shocks in debt determinants was very high even at that time. They also note that, for the future, an increase in the share of domestic currency denominated debt would be necessary to ensure debt sustainability.

Gokhale and Smetters argue that traditional budget measures are especially ill-suited to monitor fiscal sustainability in the context of growing social insurance programs. Focussing on the USA, they suggest that federal budget agencies should begin reporting different indicators which can give a better sense of the fiscal situation and of the implication of alternative means of correcting it. Specifically, they suggest to refer to the Fiscal Imbalance Indicator and to the Generational Imbalance Indicator. The former is the difference between all projected federal receipts and the sum of the current federal debt held by the public plus the present value in today's dollars of all projected federal non-interest spending. The latter measure indicates how much of this imbalance is caused by past and present generations.

The comments by Claussen focus on the four papers on public debt in emerging markets. He points out that there is no simple rule for determining whether a government's debt is sustainable or not and argues that while the approaches considered by the papers may give a useful account of the situation of emerging markets as a group, they should be used with caution when assessing the situation of each country separately. He suggests that a good measure of sustainability has to be based on the notion that the borrowing and default decision of a government is the result of a dynamic political economy game. While acknowledging the difficulties involved, he argues that such a measure could be built starting from a detailed model of the costs of default.

Correia da Cunha reconsiders the analysis in the paper by Milesi-Ferretti and Moriyama. He acknowledges that net worth is superior to gross debt as a fiscal indicator as it is not affected by re-compositions in general government assets and liabilities. However, he underlines the high informational requirements for a proper computation of net worth (specifically with reference to the value of the public capital stock and to estimates of its depreciation). He also points out that there are measures which can exert a negative effect on sustainability without affecting net worth, such as an increase in future pension payments or in payments related to the construction of infrastructures under public-private partnership schemes. To limit recourse to creative accounting, Correia da Cunha suggests, first, monitoring more than one indicator and, second, reinforcing the independence of the national statistical institutes and the ability of parliaments to follow fiscal developments.

Satou notes that while assessing public liabilities is not an easy task, all the papers in the first session have produced interesting results. She examines separately the papers dealing with Latin America and those concerning European countries. She finds that the main points made in the first set of papers concern: (a) the inadequacy of the primary surplus run by most Latin American countries with respect to what is necessary for debt sustainability; (b) the relevance of hidden liabilities; and (c) the contribution of external factors. Concerning Europe, she points out that while fiscal conditions are good as compared to emerging market economies, many issues remain to be studied. She also warns that the interpretation of net worth figures should take into account developments in asset prices and argues that financing the deficit via revenues from assets can determine distortions in the allocation of resources.

2. Public debt and fiscal rules

Section 2 includes eight papers which focus on different issues concerning public debt and fiscal rules. More specifically, the papers deal with three relevant topics: the effectiveness of fiscal rules in keeping debt under control; the relationship between fiscal rules and choices concerning debt measurement and accounting criteria; the effects of fiscal rules on macroeconomic variables, namely interest rates and economic activity.

The paper by Mink and Rodríguez-Vives focuses on debt measurement issues with a specific reference to euro-area countries. Two debt measures are discussed: the debt relevant for European fiscal rules (the Excessive Deficit Procedure debt measure) and the ESA95 debt. The former is analysed by breaking it down by financial instrument, holder, government sub-sector, maturity and currency. Differences between the two measures reflect differences in instrument coverage, in the treatment of accrued interests and in the valuation method applied. The paper also briefly refers to issues concerning the possible inclusion of implicit liabilities in the debt statistics and the possible computation of a net measure of debt.

Boothe contributes to the literature that focuses on the impact of budgetary institutions on fiscal outcomes by examining the interaction between accounting regimes and fiscal rules. The paper builds and calibrates a model through which cash and accrual accounting regimes are compared and their interaction with different fiscal rules is analysed. The paper does not take a position on the suitability of cash versus accrual regimes. It rather looks for the circumstances under which governments may choose to move from an accounting system to the other. The author stresses that rules which discourage deficit financing are harder to comply with under cash accounting than under accrual accounting.

Woods analyses the role of public debt within the UK fiscal rules. The analysis is framed in the context of both the theoretical literature on fiscal sustainability and of the UK debt history. The UK government has two rules: the golden rule and the sustainable investment rule. The paper focuses on the latter, which requires public sector net debt as a proportion of GDP to be held at a stable and prudent level over the economic cycle. More specifically, net debt should be maintained below 40 per cent of GDP over the economic cycle. First, the paper discusses the theoretical basis underlying the role of the debt within the UK fiscal framework. Then it assesses the degree of sustainability of UK public finances. The paper concludes that, on the basis of current policies and under a range of reasonable assumptions, the UK public finances seem sustainable in the long term.

The paper by Turrini and in’t Veld focuses on the impact of the European fiscal rules on economic activity. Their investigation concerns euro-area countries and it is in two steps. First, they provide an estimate of the fiscal outcomes that would have prevailed in the absence of the European fiscal framework. Without fiscal rules, euro-area countries would have ended up with higher primary deficits and higher debt. Secondly, these counterfactual public finances outturns are plugged into the European Commission's econometric model to assess their effects on macroeconomic variables. The authors find that, especially when the effects of worsening in public finance variables on risk premia are taken into account, the positive GDP effects are short-lived.

In the light of the ongoing discussion concerning the effectiveness of the European fiscal rules, Balassone, Franco and Giordano reconsider the debate which took place before the approval of the Maastricht Treaty by investigating whether market mechanisms can be relied upon as a fall-back solution in case of rule-failure. First, the conditions for an effective market solution are examined and the European institutional framework is assessed against them. Second, the relationship between fiscal performance, credit rating and interest rates is discussed with reference to both theory and practice in EMU countries. Finally, governments' sensitivity to market signals is analysed. The findings point to a significant, though small, reaction of interest rates to fiscal imbalances and to a slow government response. The authors conclude that market mechanisms cannot be relied upon for replacing fiscal rules even if they can play an important complementary role.

Laubach provides a critical review of the empirical literature that focuses on the effects of budget deficits on interest rates. The main empirical problem in estimating this relationship is to control for other factors determining real interest rates. In particular, the simultaneous response of monetary policy and automatic stabilisers can in principle mask the effect of discretionary fiscal policy on interest rates. The paper stresses that simple regressions of current interest rates on current budget deficits yield ambiguous results which are consistent with the view that endogeneity problems in such regressions are pervasive. The paper considers different solutions for coping with these problems. It shows that when endogeneity problems are properly accounted for, mainly by adequately considering expectations of both deficits and interest rates, available studies tend to find strong evidence that increases in budget deficits raise interest rates.

Also the paper by Faini focuses on the relationship between fiscal policy and interest rates. With reference to the European context, the paper addresses two issues. First, it investigates whether national fiscal policies either affect country specific spreads or the average level of euro-area interests rates. Only in the latter case are there significant externalities on the area from national misbehaviour. Second, it discusses whether this negative externality is likely to be more important for high-debt countries. The empirical analysis shows that while national fiscal policy has a limited impact on spreads, it has a more important impact on the area interest rates. Moreover, lack of fiscal discipline in high debt countries has a stronger impact on interest rates. Nevertheless, the problem is not high debt *per se*, but high debt together with lack of fiscal discipline.

Ber, Brender and Ribon study the effects of fiscal and monetary policy on bond yields with reference to the Israeli experience during the Nineties. They find that both monetary and fiscal policy affect the money market yields. On the one hand, fiscal policy has a direct impact on the money market via the expected deficit and an indirect one via inflation expectations. The former mechanism is relevant only when the effects of the cycle are accounted for and it is larger on long-term than on short-term yields. On the other hand, monetary policy has a marked direct impact on short-term yields, but also on long-term ones. The paper finds that the monetary policy effects on the money market dominate and notes that this result may be due to the disinflationary policy implemented in Israel during the Nineties.

In commenting the papers of this section, Onrubia points to the three issues they cope with: the effectiveness of fiscal rules in controlling public debt; the measurement of public debt; the relationship between public debt, budget deficits, interest rates and inflation. With reference to the effectiveness of fiscal rules, he stresses the importance of transparency and the role that institutions can play in achieving it. He also underlines the importance of considering the role played by uncertainty within long-term sustainability analysis, an issue which is considered in Wood's paper. Finally, Onrubia mentions the importance of institutions as a support not only to formal fiscal rules but also to appropriate accounting practices.

Schneider reconsiders the analyses and the evidence provided by the papers of this section in order to answer two questions. Does the market respond to fiscal laxity? Is the market response adequate? He believes that the market responds to fiscal deficits and that there are economic reasons why empirical analyses tends to underestimate this response. Indeed, by using macro-econometric models as a benchmark, he stresses that market response seems adequate. If so, why should fiscal rules be useful? Schneider gives many reasons, among which are the timing of the market response, the importance of anchoring expectations and the possibility that markets may misperceive fiscal outcomes.

Also Momigliano focuses attention on the relationship between fiscal policy and interest rates. He notes that there are two main problems to face when trying to assess empirically the impact of fiscal policy on interest rates. First, cyclical conditions tend to affect simultaneously both the budget balance and interest rates. This endogeneity tends to distort the estimates of the coefficient of the fiscal variables. Secondly, the budget balance may affect nominal interest rates either via expectations or via effects on the real interest rates. Distinguishing between these two components may be relevant.

3. Public debt, ageing and fiscal sustainability

Section 3 includes eight papers concerning medium and long-term issues. Two of them are about the assets and liabilities implicit in private pensions and public-private partnership. Four papers concern the role of public debt in the design of fiscal policy frameworks aimed at ensuring fiscal sustainability. The ageing context is also considered. The other two papers focus on the effect of debt on saving decisions and on the relationship between public debt and fiscal policy regimes.

Antolín, de Serres and de la Maisonneuve examine the long-term budgetary implications of the tax incentives provided to private pension schemes. The paper considers seventeen OECD countries and focuses on schemes that generate tax deferral. It estimates the flows of budgetary costs and revenues related to the schemes over the period 2000-50 and the present value of the implicit fiscal asset of governments. According to the paper, tax-favoured schemes are likely to remain costly over the period considered in spite of the increase in revenues resulting from population ageing. Budgetary costs would be smaller if tax incentives were to induce additional savings. The authors note that these results do not question the support granted in many countries to private pension schemes. *Inter alia*, this support allows government to shift sizeable tax revenues to the period in which the impact of ageing on public budgets will peak.

The paper by Cangiano, Hemming and Ter-Minassian evaluates the implications for public finances of public-private partnerships (PPPs). An increasing number of countries have introduced schemes where the private sector supplies infrastructure assets and services. While these schemes can increase the supply of infrastructure and reduce costs, government guarantees can be a major source of fiscal risk. The paper examines the main features of PPP schemes, the underlying economic problems and the conditions that can make the recourse to PPPs efficient. The authors also examine the institutional features of PPPs: the legal framework, risk transfer, fiscal accounting and reporting. The paper concludes by pointing to the need to carefully assess the budgetary risks associated with PPPs, to ensure appropriate accounting standards and to strengthen disclosure requirements concerning the underlying risks and contingent liabilities.

Höppner and Kastrop examine the role of fiscal institutions and budgetary procedures in Germany with respect to the objective of safeguarding sound public finances in the long run. The paper analyses the main factors underlying debt developments in Germany in recent decades. It also examines budgetary prospects, pointing to the increasing share of public expenditure which depends on entitlements which cannot be modified over the short-term and to the spending increases stemming from the ageing process. The paper then moves to considering the role of medium-term planning in the German budget and the current approach to long-term issues. In this context, Höppner and Kastrop evaluate some possible reforms. In particular, they consider the use of indicators concerning the quality of public finances, such as the "Public expenditure for growth and sustainable development". In view of the federal structure of the country, they also examine the possibility of introducing a National Stability Pact.

The paper by Kajaste examines the role of long-term sustainability and debt issues in the European Union fiscal framework. It laments the lack of an explicit and operational link between the Stability and Growth Pact and the sustainability of public finances and it notes that this aspect may have contributed to the recent unsatisfactory outcomes in the implementation of EU fiscal rules. The paper examines the steps taken by the European Council and the European Commission to increase the focus on sustainability and debt issues in EU fiscal surveillance. It also examines the role that these issues have played in the surveillance concerning some potentially problematic countries. Finally, the paper examines some further steps that could be taken at the national and European level to enhance the role of long-term fiscal considerations.

The paper by Klyvienė examines the prospects for budgetary policy in Lithuania. It evaluates the recent evolution of public debt and provides estimates concerning contingent liabilities. The paper also examines demographic trends and points to a sizeable increase in the dependency ratio. It also presents alternative scenarios concerning the balance of the State Social Insurance Fund and their implications for public debt. The paper shows that public debt is currently rather low and the conditions of the Fund in the coming years are expected to be rather favourable. However, demographic trends are likely to determine sizeable deficits and an increase in the debt level. The deficit of the State Social Insurance Fund will also be increased by the introduction of the second funded pillar. Klyvienė points to the need to introduce further pension reforms, such as extending the coverage of the system and further increasing retirement age.

The paper by Steindel examines the impact on saving decisions of the expected future debt growth in the USA arising from the increase in pension and health spending. After having considered the long-term outlook of the main social programmes, pointing to the expected strains, the paper evaluates the connections between consumer behaviour and entitlement programs. Steindel argues that the provision of public pensions does not seem to depress savings and capital formation. This may depend on the frequency of changes in the rules concerning public entitlements: people do not expect that social expenditure growth will continue unchecked and discount the effects of the likely future cuts in entitlements. This suggests that reform measures need not be large in the short-term. Finally, the paper evaluates some alternative reform proposals for the US public pension and health care schemes.

Köhler-Töglhofer and Zagler investigate the impact of compositional effects on public debt dynamics under different fiscal policy regimes. The analysis moves from the literature on the role of compositional effects for the success of fiscal consolidation episodes to a broader set of policy regimes. It also considers the role of the macroeconomic environment. On the basis of evidence drawn from a large sample of countries over the period 1960-2002, the paper finds that compositional effects do not show statistically significant differences across policy regimes. It also shows that individual revenue and primary expenditure categories have an important impact on debt dynamics. A reduction in government wage consumption exhibits the strongest dampening impact on debt dynamics. In contrast to the literature, the paper finds that an increase in government revenues leads to a persistent decline in debt ratios.

The paper by Pattnaik, Prakash and Swarup Misra evaluates the sustainability of fiscal policy in India. It reviews the literature on fiscal sustainability highlighting the specific Indian contributions. It evaluates the Indian experience with fiscal rules in the context of the international debate. The paper also examines the fiscal situation in India, pointing to the efforts to ensure sustainability but also to the relatively large budget deficit. Fiscal sustainability is assessed on the basis of different approaches. The paper notes that the cost of debt in India is lower than nominal GDP growth; nevertheless the debt-to-GDP ratio is likely to increase because of the high deficit. The authors point to the need for further fiscal consolidation. They suggest to restrain spending and they stress the need for increasing public revenues.

In commenting the papers, Gokhale argues that the current generational stance of US fiscal policy provides dependable resource transfers towards retirees and prompts higher consumption. Large and credible transfers induce more consumption by the cohorts that receive them and, all else being equal, reduce national saving. Hence, reforms that terminate such transfers would stem the decline in national saving and a larger share of US domestic investment would be financed out of domestic saving. Output growth would be faster. Gokhale also notes that standard deficit and debt levels are neither necessary nor sufficient as measures of the real impact of fiscal policies on the economy. Implicit debt levels can be changed independently and can influence real economic outcomes.

In commenting the papers, Janssen focuses on two aspects: PPPs and long-term sustainability. Concerning the former issue, he notes that it is important that governments reduce costs and transfer risk and he highlights the conditions for this. Concerning long-term sustainability, he points to the experience of countries, such as Australia, New Zealand and the United Kingdom, which have incorporated specific long-term fiscal reporting requirements into the frameworks guiding their fiscal policy. He stresses the importance of fiscal reporting and of transparency.

Hervé outlines the impact of demographic trends on public expenditure for pensions, health and long-term care. She also comments on the impact of ageing on labour market and saving ratios. Finally, she evaluates some policy actions that may tackle the problems posed by ageing. In particular, she argues in favour of labour market policies aimed at increasing the supply of labour and of measures improving the budgetary situation.

4. Managing public debt

Section 4 includes seven papers focussing on debt management. They refer to the experience of specific countries such as Australia, Bulgaria, the Czech Republic and Japan and those belonging to the European Economic and Monetary Union. Different issues are covered: convergence in debt management strategies, the relationship between fiscal and monetary policy, debt management policy objectives and trade-offs.

Wolswijk and de Haan survey recent developments in debt management in Europe against the background of the introduction of the euro and of declining government debt ratios. They find a strong convergence in debt management strategies in the euro area in terms of debt maturity, issuance of foreign currency denominated debt and use of more complex instruments than before EMU (interest rate swaps and inflation-indexed bonds are prominent examples). Convergence also seems to apply to the organisation of debt management, with a tendency to make debt management offices more independent. The authors note that some divergences remain, reflecting differences in the size of deficits and debts, as well as an increasing willingness to innovate and to attract investors' attention.

The paper by Comley and Turvey analyses debt management in Australia. The country's fiscal position became increasingly strong from the second half of the Nineties. General government net debt fell from almost 20 per cent of GDP to less than 4 per cent between 1996 and 2003. Concerns that this reduction would negatively affect financial market efficiency (mainly due to the higher cost of managing interest rate risk in the absence of a Treasury bond futures market) led the Australian government continuing to issue debt. The authors stress that this has implied that issuance policy is less and less targeted to achieving desirable cost and risk characteristics for the Government.

Matalík and Slavík examine the evolution of debt management in the Czech Republic. As with many other features of the Czech economy, changes have been dramatic in this field in connection with the transition from central planning to market mechanisms. The paper outlines the shifting policy focus: from the need to establish treasury bills and government bond markets (and to ensure and promote their liquidity) in the early stages of the process to the fine tuning of debt risk management in later years. The latter issue became relevant in connection with the increase in the outstanding debt which induced policies aimed at decreasing government dependence on the domestic bond market.

The paper by Cannata, Iacovoni, Scalera and Turco examines the trade-off between cost and risk faced by countries trying to minimise the burden of servicing a high debt in the context of the European monetary union. The authors present both a model for optimal portfolio selection and one for forecasting primary balances. They argue that the high number of stochastic factors at play and the long-term horizon that needs to be taken by the debt manager combine to make the task especially difficult. They stress that while formal models can help in fulfilling the task, no model can capture all the relevant elements. Therefore, the debt manager's experience must also be relied upon in the implementation of a strategy.

The paper by Fujii provides a throughout description of the features of the Japanese public debt in order to analyse interest rate risk. More specifically, given the high debt level, the paper aims at assessing the impact on public finances of future increases in interest rates by using a stochastic simulation. In the Japanese case no foreign-currency denominated bonds are issued and the share of floating-rate notes and bonds is negligible, so the most relevant policy option concerns the debt maturity structure. The paper concludes that a short-maturity pattern strategy increases the size of market risk even in the short run. The different risk implied by a short-maturity structure as opposed to a long-maturity structure gets bigger as the simulation period extends. Quantitative evaluations are provided.

Also the analysis by Lebow concerns Japan. Given the high public debt levels, it focuses on the fiscal implications of the monetary expansion undertaken since the early nineties and those of a possible reversal of such a policy in case inflation picks up. The paper argues that for analysing fiscal policy, the consolidated government and central bank net debt is the appropriate aggregate to be considered. According to this view, even if the ratio of public debt to GDP is high, there are important offsetting elements. First, the central bank has already monetised to a relevant extend this debt. Moreover, in case the monetary expansion is allowed to generate temporary inflation, the consolidated debt ratio would fall further. Finally, even in the case of a reversal of the monetary stance, there would be consolidated debt levels lower then generally recognised if small price increases are allowed.

Nenova and Kaloyanchev discuss possible conflicts between the targets set by budgetary policy and those set by debt management in developing countries. These countries are typically characterised by low income levels, poor infrastructure and fragile confidence in policies commitment. In order to cope with these problems budgetary policy is likely to lead to deficit financing and to debt accumulation. In this case the scope of debt management operations narrows and this narrowing positively depends on the speed of debt accumulation as it influences the dynamics of the risk premium on debt. In order to bring debt dynamics under control, the government has to inverse its priorities and to privilege debt management objectives. The authors stress that even if the fiscal adjustment takes place, it may take a long time before the risk premium reaches low levels (especially if there has a been a default on debt). These findings are confirmed with reference to the Bulgarian experience.

Afonso separately sums up and reviews every single paper included in this section. He notes that in principle there can be conflicts between debt management and fiscal policy objectives and it should be so. He supports the reasons for having government debt put forward in the paper concerning Australia. In addition, he stresses the risks associated with the presence of the so-called hidden debt which typically characterises transition economies. Finally, he suggests that the problems stemming from the high Japanese debt ratios should be tackled directly by targeting sizeable budgetary surpluses.

Lindh notes that the contributions of this section can be split into four groups corresponding to the geographic areas they focus on: Australia, euro area, European transition economies and Japan. He relates the paper about Australia, a very low debt country, to those concerning euro-area countries. Indeed, the latter countries should aim at a medium-term objective of close to balance or in surplus which would lead them to have diminishing and low debt levels. With reference to European transition economies, Lindh stresses that the issue of interaction (and possibly coordination) between fiscal, monetary and debt management policies is crucial.

Madhusudhan's comments touch upon the topics covered by the papers of this section by providing evidence concerning the USA. She recalls that the Federal Reserve Bank has no significant direct role in debt management. Moreover, at the federal level debt managers are primarily concerned with maintaining liquidity and efficiency in the financial markets rather than with keeping interest costs under control via swap operations. Finally, contrary to most countries considered in this section, in the USA issuances with relatively short maturities are relevant and a relatively large share of debt is held by foreign investors.