

Public Debts: Nuts, Bolts and Worries

Barry Eichengreen, Robert Feldman, Jeffrey Liebman,
Jürgen von Hagen and Charles Wyplosz

Public Debts: Nuts, Bolts and Worries

Geneva Reports on the World Economy 13

International Center for Monetary and Banking Studies (ICMB)

International Center for Monetary and Banking Studies
11A Avenue de la Paix
1202 Geneva
Switzerland

Tel: (41 22) 734 9548
Fax: (41 22) 733 3853
Web: www.icmb.ch

© September 2011 International Center for Monetary and Banking Studies

Centre for Economic Policy Research

Centre for Economic Policy Research
3rd Floor
77 Bastwick Street
London EC1V 3PZ
UK

Tel: +44 (20) 7183 8801
Fax: +44 (20) 7183 8820
Email: cepr@cepr.org
Web: www.cepr.org

ISBN: 978-1-907142-31-4

Public Debts: Nuts, Bolts and Worries

Geneva Reports on the World Economy 13

Barry Eichengreen

University of California, Berkeley and CEPR

Robert Feldman

Morgan Stanley

Jeff Liebman

Harvard University

Jürgen von Hagen

University of Bonn and CEPR

Charles Wyplosz

The Graduate Institute, Geneva and CEPR

ICMB INTERNATIONAL CENTER
FOR MONETARY
AND BANKING STUDIES
CIMB CENTRE INTERNATIONAL
D'ETUDES MONETAIRES
ET BANCAIRES



International Center for Monetary and Banking Studies (ICMB)

The International Centre for Monetary and Banking Studies was created in 1973 as an independent, non-profit foundation. It is associated with Geneva's Graduate Institute of International Studies. Its aim is to foster exchanges of views between the financial sector, central banks and academics on issues of common interest. It is financed through grants from banks, financial institutions and central banks.

The Center sponsors international conferences, public lectures, original research and publications. It has earned a solid reputation in the Swiss and international banking community where it is known for its contribution to bridging the gap between theory and practice in the field of international banking and finance.

In association with CEPR, the Center launched a new series of *Geneva Reports on the World Economy* in 1999. The eleven subsequent volumes have attracted considerable interest among practitioners, policy-makers and scholars working on the reform of international financial architecture.

The ICMB is non-partisan and does not take any view on policy. Its publications, including the present report, reflect the opinions of the authors, not of ICM or any of its sponsoring institutions.

President of the Foundation Board
Director

Philipp Hildebrand
Charles Wyplosz

Centre for Economic Policy Research (CEPR)

The Centre for Economic Policy Research is a network of over 700 Research Fellows and Affiliates, based primarily in European universities. The Centre coordinates the research of its Fellow and Affiliates and communicates the results to the public and private sectors. CEPR is an entrepreneur, developing research initiatives with the producers, consumers and sponsors of research. Established in 1983, CEPR is a European economics research organization with uniquely wide-ranging scope and activities.

The Centre is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-term policy questions. CEPR research may include views on policy, but the Executive Committee of the Centre does not give prior review to its publications, and the Centre takes no institutional policy positions. The opinions expressed in this report are those of the authors not those of the Centre for Economic Policy Research.

CEPR is a registered charity (No. 287287) and a company limited by guarantee and registered in England (No. 1727026).

Chair of the Board
President
Chief Executive Officer
Research Director
Policy Director

Guillermo de la Dehesa
Richard Portes
Stephen Yeo
Lucrezia Reichlin
Richard Baldwin

About the Authors

Barry Eichengreen is the George C. Pardee and Helen N. Pardee Professor of Economics and Professor of Political Science at the University of California, Berkeley, where he has taught since 1987. He is a Research Associate of the National Bureau of Economic Research (Cambridge, Massachusetts) and Research Fellow of the Centre for Economic Policy Research (London, England). In 1997-98 he was Senior Policy Advisor at the International Monetary Fund. He is a fellow of the American Academy of Arts and Sciences (class of 1997).

Professor Eichengreen is the convener of the Bellagio Group of academics and economic officials and chair of the Academic Advisory Committee of the Peterson Institute of International Economics. He has held Guggenheim and Fulbright Fellowships and has been a fellow of the Center for Advanced Study in the Behavioral Sciences (Palo Alto) and the Institute for Advanced Study (Berlin). He is a regular monthly columnist for Project Syndicate.

His most recent books are *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System* (January 2011), *Emerging Giants: China and India in the World Economy*, co-edited with Poonam Gupta and Ranjiv Kumar (2010), *Labor in the Era of Globalization*, co-edited with Clair Brown and Michael Reich (2009), *Institutions for Regionalism: Enhancing Asia's Economic Cooperation and Integration*, co-edited with Jong-Wha Lee (2009), and *Fostering Monetary & Financial Cooperation in East Asia*, co-edited with Duck-Koo Chung (2009). Other books include *What G20 Leaders Must Do to Stabilize Our Economy and Fix the Financial System*, co-edited with Richard Baldwin, (e-book 2008), *Rescuing Our Jobs and Savings: What G7/8 Leaders Can Do to Solve the Global Credit Crisis*, co-edited with Richard Baldwin, (e-book 2008), *Globalizing Capital: A History of the International Monetary System*, Second Edition (2008), *The European Economy since 1945: Coordinated Capitalism and Beyond* (updated paperback edition, 2008), *Bond Markets in Latin America: On the Verge of a Big Bang?*, co-edited with Eduardo Borensztein, Kevin Cowan, and Ugo Panizza (2008), and *China, Asia, and the New World Economy*, co-edited with Charles Wyplosz and Yung Chul Park (2008).

Professor Eichengreen was awarded the Economic History Association's Jonathan R.T. Hughes Prize for Excellence in Teaching in 2002 and the University of California at Berkeley Social Science Division's Distinguished Teaching Award in 2004. He is the recipient of a *doctor honoris causa* from the American University in Paris, and the 2010 recipient of the Schumpeter Prize from the International

Schumpeter Society. He is President of the Economic History Association in the 2010-11 academic year.

Robert Feldman is a Managing Director who joined Morgan Stanley Japan Ltd. in February 1998 as the chief economist for Japan. In 2003, he also became Co-Director of Japan Research. He continues to focus on the outlook for the Japanese economy and on interest rate movements. Robert has published three books, *Japanese Financial Markets: Deficits, Dilemmas, and Deregulation* (MIT Press, 1986), *Nihon no Suijaku* ("The Weakening of Japan", Toyo Keizai 1996, in Japanese) and *Nihon no Saiki* ("Starting Over", Toyo Keizai 2001, in Japanese). A fluent speaker of Japanese, he has also translated four books from Japanese to English, including *Economic Growth in Prewar Japan* (by Takafusa Nakamura, Yale University Press). In addition, he is a regular commentator on *World Business Satellite*, TV Tokyo's nightly business program. Robert was the chief economist for Japan at Salomon Brothers from 1990 to 1997. He worked for the International Monetary Fund from 1983 through 1989, in the Asian, European, and Research Departments.

Robert holds a Ph.D. in economics from the Massachusetts Institute of Technology, and B.A.s in economics and in Japanese studies from Yale. Between college and graduate school, he worked at both the Federal Reserve Bank of New York and at Chase Manhattan Bank. Robert first came to Japan as an exchange student and also studied at the Nomura Research Institute and the Bank of Japan.

Jeffrey B. Liebman, Malcolm Wiener Professor of Public Policy, teaches courses in social policy, public sector economics, and American economic policy. In his research, he studies tax and budget policy, social insurance, poverty, and income inequality. Recent research has examined the impacts of government programs such as the Earned Income Tax Credit, Social Security, and housing vouchers. During the first two years of the Obama Administration, Liebman served at OMB, first as Executive Associate Director and Chief Economist and then as Acting Deputy Director. From 1998 to 1999, Liebman served as Special Assistant to the President for economic policy and coordinated the Clinton Administration's Social Security reform technical working group. Liebman received his BA from Yale University and his MA and PhD in economics from Harvard.

Professor Dr. Jürgen von Hagen was Director at the Center for European Integration Studies from 1996 to 2005. Since then, he has been a Professor of economics at the University of Bonn and director of the Institute for International Economics. He is in charge of the economic research pillar of ZEI. Since 2009 Prof. von Hagen is also vice-rector for research and junior academic personnel at the University of Bonn.

Prof. von Hagen's main research focuses on issues of economic policy, monetary theory and policy, European economic integration as well as international and public finance.

After studying economics at the University of Bonn, von Hagen was research assistant at the Institute for International Economics there. Subsequently after

the conferment of his doctorate he was a research fellow at Indiana University (USA) from 1987–1992. From 1992–1996 he was Professor of economics at the University of Mannheim. Among other things, von Hagen was a research consultant at the International Monetary Fund. He was also visiting professor at the Universities of Gießen, Leuven (Belgium) and Tel Aviv (Israel). Moreover he did major consultancies for the European Commission, the World Bank, the Interamerican Development Bank, the Sultanate of Oman, the Republic of Cyprus, the European Parliament and the Swedish Parliament.

Prof. von Hagen was a member of evaluation commissions for the German Research Foundation (DFG), the German Academic Council and the US National Science Foundation. He received various research grants, *inter alia* from the VW Foundation, the DFG, the European Commission and the German Academic Exchange Service (DAAD).

Von Hagen is co-editor of the journal *European Economic Review*. He is author and editor of more than 250 publications.

Charles Wyplosz is Professor of International Economics at the Graduate Institute in Geneva where he is Director of the International Centre for Money and Banking Studies.

Previously, he has served as Associate Dean for Research and Development at INSEAD and Director of the PhD program in Economics at the Ecole des Hautes Etudes en Science Sociales in Paris. He also has been Director of the International Macroeconomics Program of CEPR, the leading European network of economists.

His main research areas include financial crises, European monetary integration, fiscal policy and regional monetary integration. He is the co-author of two leading textbooks (*Macroeconomics* and *European Economic Integration*) and has published several books. Previously a founding Managing Editor of the review *Economic Policy*, he serves on several boards of professional reviews and European research centers. He is a regular columnist in newspapers (*Financial Times*, *Le Monde*, *Libération*, *Le Temps*, *Finanz und Wirtschaft*, and *Handelsblatt*) and speaks weekly on Radio Suisse Romande.

Currently a member of the Panel of Experts of the European Parliament's Economic and Monetary Affairs Committee and of the "Bellagio Group", Charles is an occasional consultant to the European Commission, the IMF, the World Bank, the United Nations, the Asian Development Bank, and the Inter-American Development Bank. He has been a member of the *Conseil d'Analyse Economique* which reports to the Prime Minister of France, of the French Finance Minister's *Commission des Comptes de la Nation* and has advised the governments of the Russian Federation and of Cyprus.

Charles holds degrees in Engineering and Statistics from Paris and a PhD in Economics from Harvard University.

Contents

<i>About the Authors</i>	v
<i>List of Conference Participants</i>	xiii
<i>Acknowledgements</i>	xx
<i>Foreword</i>	xxii
Executive Summary	1
1 Introduction and Overview	7
2 The Political Economy of Fiscal Consolidation	15
2.1 Introduction	15
2.2 The common pool problem of public finances and the budget process	16
2.3 The budget process: Comprehensiveness and transparency	17
2.4 Results-oriented approaches	21
2.5 Budgeting institutions: Designing the budget process	24
3 The United States: Can the 1990s Fiscal Rebalancing Be Repeated?	33
3.1 Introduction	33
3.2 The deterioration in the fiscal outlook	34
3.3 Prospects for medium-term fiscal consolidation	38
3.4 The longer-term outlook: Demographics and health care expenditures	41
3.5 The political economy of reform	43
3.6 Conclusion	45
4 Europe's Public Debt Challenge	47
4.1 Introduction	47
4.2 The deficit bias	48
4.3 The effect of population ageing	49
4.4 Radical change during the crisis	53
4.5 The debt challenge	55
4.7 Conclusion	63

5	Japan's Fiscal Woes	65
5.2	The true state of Japanese finances	65
5.3	Political economy of fiscal policy in Japan: The common pool is very deep	70
5.4	The budget procedure problem	73
5.5	Budget screenings: An attempt at process improvement	74
5.6	Taming the beast: The arithmetic of fiscal restructuring	75
5.7	The economics of fiscal reform	78
5.8	A growth-model approach to fiscal reform	78
5.9	Prospects for fiscal reform	81
5.10	Deflation and fiscal reform	82
	Appendix: The Tohoku earthquake and fiscal policy	86
6	Recommendations	89
6.1	Institutional reforms	90
6.2	European countries	96
6.3	The Eurozone	96
6.4	The United States	98
6.5	Japan	101
6.6	Pro-growth policies	104
6.7	Conclusion	109
	Appendix: Examples of successful and unsuccessful institutions	111
	Discussion	119

List of Figures

Figure 3.1	The deterioration of the US budget outlook	35
Figure 4.1	Public debt of the US and of the Eurozone	49
Figure 4.2	Change in total population, 2008–2060	50
Figure 4.3	Dependency ratio	51
Figure 4.4	Increase in ageing-related spending between 2007 and 2035	52
Figure 4.5	Debt increases from 2007 to 2011	54
Figure 4.6	Public spending in the OECD: regressing to the mean	61
Figure 4.7	British public debt	63
Figure 5.1	General government balances, by “business line”	69
Figure 5.2	Social spending and revenues, vs. ageing	69
Figure 5.3	Old/young ratios vs. population/seat, by prefecture	72
Figure 5.4	Saving and investment by corporates and households	83
Figure 5.5	Energy supply and demand scenario, 2007–75	87
Figure 6.1	Public debts in The Netherlands and the Eurozone	111
Figure 6.2	Public debt in Switzerland	113
Figure 6.3	Budget deficit in the UK	114
Figure 6.4	Gross public debt in France	116

List of Tables

Table 3.1	Components of US federal spending	36
Table 3.2	Three projections of the US budget balance	37
Table 4.1	Gross public debts in 2012	55
Table 4.2	Gross public debts in 2035	56
Table 4.3	Debt reductions	58
Table 4.4	Evolution between 1999 and 2006	59
Table 5.1	General account of the central govt., initial budget, FY2008	66
Table 5.2	Accounts of general government, consolidated, FY2008	67
Table 5.3	Business line breakdown of government transactions, FY2008	68
Table 5.4	Rough estimate of government transfers for seniors, FY2008	71
Table 5.5	General government fiscal consolidation scenarios	77
Table 5.6	Macro/fiscal scenarios in a growth model: values for 2035	80
Table 5.7	Time trend projection of trade and current balances	83
Table 5.8	Interest rate assumptions for simulations	86
Table 6.1	The budget process in European countries	91
Table 6.2	Actual and predicted budgetary institutions	95

List of Boxes

Box 4.1 Inflationary financing of large debts

62

List of Conference Participants

Ivan Adamovich	Member of Executive Management Wegelin & Co Geneva
Filippo Altissimo	Economist Brevan Howard Investment Products Limited Geneva
Agnès Arlandis	Managing Director, Head of Emerging Markets HSBC Private Bank Suisse Geneva
Vit Barta	Advisor to Governor Czech National Bank Prague
Rémy Bersier	Member of the Executive Board Bank Julius Baer & Cie SA Geneva
Laurence Boone	Chief Economist Barclays Capital Paris
Pascal Boris	Chief Executive Officer BNP Paribas (Suisse) SA Geneva
Luigi Buttiglione	Head of Global Strategy Brevan Howard Investment Products Limited Geneva
Mark Carey	Senior Adviser Federal Reserve Board Washington, D.C.
Stephen Cecchetti	Economic Adviser Bank for International Settlements Basel

Eric Chaney	Chief Economist AXA Paris
Benoît Coeure	Deputy Director General, Chief Economist Directorate General of the Treasury Paris
Jean-Pierre Danthine	Member of the Governing Board Swiss National Bank Zürich
Pierre Darier	Partner Lombard Odier Darier Hentsch & Cie Geneva
Jacques Delpla	Economist Conseil d'Analyse Economique Paris
Paul H. Dembinski	Professor University of Fribourg and L'Observatoire de la Finance Geneva
Andreas Dombret	Member of the Executive Board Deutsche Bundesbank Frankfurt am Main
Christophe Donay	Head of Asset Allocation & Macro Research Pictet & Cie Geneva
Christopher Donohue	Managing Director Global Association of Risk Professionals Jersey City, N.J.
Bernard Droux	Managing Partner Lombard Odier Darier Hentsch & Cie Geneva
Robert Feldman	Managing Director Morgan Stanley MUFG
Daniele Franco	Head of Department Structural Economic Analysis Banca d'Italia

Paolo Garonna	General Director ANIA Rome
Hans Genberg	Assistant Director Independent Evaluation Office of the IMF Washington, D.C.
Stefan Gerlach	Managing Director Institute for Monetary and Financial Stability House of Finance Goethe University of Frankfurt Frankfurt
Michel Girardin	Member of Senior Management Union Bancaire Privée Geneva
Christos Gortsos	Secretary General Hellenic Bank Association Athens
Anne Heritier Lachat	Professor Chair of the Board of Directors FINMA Bern
Philipp Hildebrand	Chairman of the Governing Board Swiss National Bank Zürich
Kasumasa Iwata	President Japan Center of Economic Research Tokyo
Thomas Jordan	Vice Chairman of the Governing Board Swiss National Bank Bern
Christian Kastrop	Deputy Director General Ministry of Finance Berlin
Pierre Keller	Former Senior Partner Lombard Odier Darier Hentsch & Cie Geneva
Ulrich Kohli	Professor of Economics University of Geneva Geneva

Akira Kohsaka	Professor School of International Studies Kwansei Gakuin University Hyogo
Dino Kos	Managing Director Hamiltonian Associates, Ltd New York
Signe Krogstrup	Deputy Head of Monetary Policy Analysis Swiss National Bank Zürich
Jean-Pierre Landau	Deputy Governor Banque de France Paris
Jeffrey Liebman	Professor of Public Policy Harvard University Cambridge, M.A.
Henri Louberge	Professor University of Geneva Geneva
Thierry Malleret	Partner IJ Partners SA Geneva
Michael Manz	Head of International Finance and Financial Stability Federal Department of Finance Bern
Alessandro Missale	Professor of Economics Faculty of Political Science University of Milan Milan
Maurice Monbaron	Member of the Board Credit Agricole (Suisse) SA Geneva
Trifon Natsis	Senior Portfolio Manager Bervan Howard Investment Products Limited Geneva
Alexander Notter	Senior International Adviser Millenium Associates AG Zug

Lars Nyberg	Deputy Governor Sveriges Riksbank Stockholm
Sebastian Paris-Horvitz	Chief Market Strategist HSBC Private Bank Suisse Geneva
Michel Peytrignet	Director, Head Economic Affairs Swiss National Bank Zürich
Ivan Pictet	Former Senior Managing Partner Pictet & Cie Geneva
Jean Pisani-Ferry	Director BRUEGEL Brussels
Friederike Pohlenz	Deputy Head of Section Multilateral Affairs State Secretariat for International Finance Matters Bern
Richard Portes	Professor of Economics London Business School President, CEPR London
Jan Frederic Qvigstad	Deputy Governor Norges Bank Oslo
David Ramsden	Chief Economic Advisor Head of Government Economic Service HM Treasury London
Barbara Roos	Team Head and Relationship Manager, International Clients Wegelin & Co Private Bankers Geneva
Jean-Pierre Roth	Chairman Geneva Cantonal Bank Geneva

Amlan Roy	Managing Director Credit Suisse (Securities) Europe Limited London
Monica Rubiolo	Head Macroeconomic Support SECO Bern
Hans-Joerg Rudloff	Chairman Barclays Capital London
Neal Soss	Chief Economist Credit Suisse New York
Alexander Swoboda	Emeritus Professor of Economics The Graduate Institute Geneva
Jens Thomsen	Governor, retired Danmarks Nationalbank Copenhagen
Cedric Tille	Professor of Economics The Graduate Institute Geneva
Edwin Truman	Senior Fellow Peterson Institute for International Economics Washington, D.C.
Angel Ubide	Director of Global Economics Tudor Investment Corporation Washington, D.C.
Ignazio Visco	Member of the Governing Board and Deputy Director General Banca d'Italia Rome
Juergen von Hagen	Professor of Economics University of Bonn Bonn
Sushil Wadhvani	Chief Executive Officer Wadhvani Asset Management London

Pawel Wyczanksi	Advisor, Financial System National Bank of Poland Warsaw
Charles Wyplosz	Professor of International Economics The Graduate Institute Director ICMB, Geneva CEPR, London
Fabrizio Zampolli	Senior Economist Bank for International Settlements Basel

Acknowledgements

The authors are grateful to the discussants and to the participants at the Geneva Conference of May 2011, where a preliminary version of the present report was presented and carefully discussed. Additional comments from Francesco Giavazzi, and Claire Wakefield are gratefully acknowledged.

The discussion section has been prepared by Lucie Majstrova and Daniel Walter. Many thanks as well to Laurence Procter who singlehandedly organized the conference and performed all of the background work behind this Report. Finally, the authors are grateful to Anil Shamdasani and Samantha Reid for an outstanding job at editing and publishing the report, and to Viv Davies and Anil Shamdasani for support and guidance at various steps of this undertaking.

Foreword

The thirteenth *Geneva Report on the World Economy* examines the fiscal woes of the US, the EU and Japan. Each faces serious medium term challenges, but they have arisen in different ways and admit of no common solution. Faster growth would help in each case: Japan's difficulties have arisen in part from two decades of slow growth, and it would be easier to stabilise debt burdens in both the US and the EU if growth were to pick up. But growth alone won't resolve the problems. In Japan, the report argues, the level of social benefits paid to older people is far too high, squeezing out many other forms of government spending as a result. Reducing these benefits is difficult: older people tend to live in rural areas, which are overrepresented in the Diet. In the US, on the other hand, part of the problem is insufficient tax revenue, another part of the problem is an inefficient health system, but the checks and balances built into the US political system have so far made it impossible to agree on adequate measures. In Europe the problem is different again: government expenditure has tended to be high in Europe, but member states have little incentive to balance their books because they think will be bailed out when difficulties arise.

The *Geneva* reports have never shied away from confronting difficult, apparently intractable issues. The thirteenth report is no exception. Fiscal policy problems build up slowly, often over decades, and so there is seldom the sense of urgency necessary to adopt painful reforms. And these reforms must be sustained over the long term in order to be effective. Since there is always a political constituency for lower taxes or higher spending, sustaining painful reforms is what democracies find most difficult.

As the authors of the report note, 'there is no magic formula for successful fiscal consolidation'. All the more reason for ICMB and CEPR to welcome the report's painstaking and thoughtful analysis, which we are sure will stimulate a lively debate.

Charles Wyplosz
Director, ICMB

Stephen Yeo
Chief Executive Officer, CEPR

15 September 2011

Executive Summary

This 13th *Geneva Report on the World Economy* is devoted to fiscal policy reforms in the USA, Europe and Japan. It offers a common political-economy framework to diagnose the need for fiscal consolidation. It proposes institutional solutions rooted in that diagnosis.

Even before the global financial crisis, fiscal burdens had grown so heavy in most advanced countries that doubts emerged about fiscal sustainability. The global crisis of 2008–10 then severely aggravated fiscal problems. Ageing of populations will aggravate them more. Thus, credible plans for medium-term fiscal consolidation are an urgent priority.

Political economy framework for diagnosis

All democracies face the common pool problem that financing public policies from general tax funds creates an externality. Those who enjoy the marginal benefit of more spending are not the same as those who bear the marginal cost. The same argument applies to tax cuts. The result is that lobbies successfully call for more spending or less taxes, and force the costs on society as a whole. Those costs will be paid, now or in the future, resulting in lower growth, higher unemployment, social stress and higher inflation.

Improve decision rules

Durable solutions require institutional reform. But different institutions work best in different political environments. Reforms must be tailored to the political environment of each country.

Two broad classes of solutions exist. Results-oriented approaches focus on outcomes. (These include constitutional or legal deficit, debt or spending limits and fiscal rules specifying (multi)annual spending or deficit targets.) Procedural approaches focus on decision-making processes and take two main forms: delegation and contracts. Delegation is based on hierarchical structures among the decision makers; contracts are based on horizontal relationships. Delegation is appropriate in parliamentary systems with single-party governments, while contracts is the proper approach for multiparty coalition governments.

Similarly, there is no magic formula for successful fiscal consolidation. Where the proximate source of the problem is excessive government spending – as has historically been the case across much of Europe – successful fiscal consolidation will have to rely principally on spending cuts. Where the proximate source of the problem is inadequate revenue – as is partly (but only partly) the case in the United States today – successful fiscal consolidation will have to involve revenue increases.

Growth is crucial for fiscal sustainability

The debt-to-GDP ratio has not just a numerator but also a denominator. The best way to reduce that ratio is by growing the denominator. This is an issue in virtually every nation. In the United States, the controversy over the recent debt ceiling agreement revolved around whether the debt deal would help or hinder growth. In Europe, sharp cutbacks in public spending in the UK and southern Europe have depressed growth, and a long-lasting series of increases in tax rates caused a decade and a half of depressed growth in Germany without solving the underlying fiscal problems. In Japan, the exceptionally high debt ratio reflects the economy's inability to escape from its low-growth trap.

The United States

As a country with a presidential system with frequently divided government, the United States and its system of checks and balances has a bias toward inertia that in theory makes it difficult to address fiscal imbalances. Yet, the US political system has historically performed quite well in correcting fiscal imbalances. If fiscal imbalances are perceived to threaten the health of the economy, voters will reward elected officials who correct those imbalances. Voters also reward political leaders whom they perceive as 'doing what's right for the country'.

Despite the past success of US institutions, the recent build-up of an exceptionally large public debt makes it worth considering whether they could be made stronger. Since the 1980s, the favoured approach to overcoming inertia has been to negotiate deficit reduction packages in multiple stages. First, legislation is passed establishing multiyear targets for the amount of deficit reduction to be achieved and the consequences, typically across-the-board cuts in spending, if subsequent legislation is not passed to achieve the targets. Then decisions are made about the specific policies needed to reach the targets. The appeal of this approach is two-fold. First, by obtaining agreement in two stages, reaching a consensus is easier. Second, automatic cuts if no agreement is reached raise the cost to the President and Congress of failing to come to an agreement.

The US political system's bias towards inaction raises particular challenges for mandatory spending programmes, such as social insurance programmes (Social Security retirement benefits and Medicare health benefits) that are increasing as a share of GDP. One way to overcome this inertia would be to subject these programmes to annual appropriations. Another way would be to make the

programmes completely self-financing and to institute a trigger mechanism to ensure that spending and revenues remain equal, or to fund them via a dedicated revenue source like a VAT.

Today, projections are for persistent deficits exceeding 6% of GDP. While there is a broad consensus around the menu of policy changes that could achieve the necessary fiscal rebalancing, there is no clear path to the political deal that will be needed to enact the changes. Three comprehensive proposals for fiscal consolidation have recently been released in the USA with the aim of reducing the deficit to no more than 3% of GDP by 2015 and stabilising the debt to GDP ratio at around 70%. A compromise limiting tax expenditures appears to be the most viable approach to a bipartisan agreement.

It is likely that the US political system will be able to make the fiscal adjustments necessary to stabilise the debt-to-GDP level during the upcoming decade, but demography ensures that there will then be further deterioration in the fiscal outlook between 2021 and 2035. The challenging fiscal environment, in other words, is not going away.

Given that any legislated deficit reduction procedure can be negated by subsequent legislation, it is worth considering whether a serious constitutional amendment would help overcome inertia in closing fiscal imbalances. In theory this would be possible – including provisions to allow for countercyclical fiscal policies, designing effective enforcement and allowing for overrides by a Congressional supermajority. Whether it is in fact possible to design an amendment of this sort whose benefits outweigh the costs of lost economic policy flexibility is an open question. We have seen in the recent debt limit negotiations that artificial attempts to force action can be destabilising. Regardless, no such amendment is imminent, however, because the process for amending the US Constitution is difficult.

- Between 1979 and 2007, US real GDP per capita increased by a reasonably healthy 1.9% annual rate. Looking forward, the USA faces four challenges in sustaining high rates of growth:
- If the current high unemployment rates are allowed to persist for an extended period of time, potential GDP may be permanently lowered. Growth will likely suffer.
- Spending cuts may reduce growth-enhancing government investments in research and development, infrastructure and education.
- Growth rates may be limited if the country's human capital policies fail to improve as college completion rates fall and the large US financial sector attracts too much of the country's top talent.
- Increasing income inequality could threaten future growth rates.

Europe

Europe's public debt outlook has deteriorated because of population ageing and the global economic and financial crisis. Absent corrective action, public debts are projected to rise from 59% to 128% GDP by 2035 – and much more for some countries.

In addition to the usual national common pool problem, the Eurozone suffers from an international common pool problem whereby individual countries may be led to expect support from others, including through bailouts, as is currently the case. Alleviating these two common pool problems is therefore in the individual and collective interest of Eurozone countries.

Europe offers a rich variety of situations that illustrate both successful and unsuccessful fiscal consolidations. It also provides a rich body of evidence on the role of budgetary institutions.

One unsuccessful arrangement is the Stability and Growth Pact. It has not achieved its aims largely because it is a contract between each country and the EU (which represents the other countries). Since budget decisions ultimately rest in the hands of member states, it is local institutions that matter. Currents plans to strengthen the Pact do not acknowledge this aspect. The alternative, which implicitly underlies a one-size-fits-all approach, is a transfer of competence from member states to the EU or, more likely, to the Eurozone. Many in Europe see this as a bridge too far.

If member states are to retain fiscal policy sovereignty, the solution must be first and foremost sought at the national level. Since one size will not fit all, these solutions cannot be identical. A solution would be for every Eurozone member country to adopt a combination of rules and institutional arrangements appropriate to its own political circumstances. This implies the acknowledgment that the one-size-fits-all approach, which has dominated the fiscal framework of the Eurozone so far, is inappropriate.

The European Commission would evaluate existing or planned national arrangements and approve those that are likely to be effective in dealing with the deficit bias. Countries that fail to pass this requirement, or countries that breach their own arrangements, would face a serious disadvantage: their debt instruments would not be accepted as collateral by the European Central Bank.

Growth has also been slow in most Eurozone countries. Closing the gap in GDP per capita with the US can be a source of higher growth for a number of years. Early retirement, market-unfriendly regulation, both in labour markets and in product markets, and large, relatively low-productivity public sectors are some of the key reasons for Europe's lacklustre growth performance. They are one aspect of the common pool problem.

Spending ceilings that imply a reduction of the public sector size may therefore be useful a complement to debt and deficit rules in European countries. Growth could also be boosted in practice by tax systems and personal bankruptcy regulations designed to encourage rather than discourage risk taking. Improving the ability of European financial markets to provide venture capital and other forms of financing for start-ups and the development of new products and technologies would improve growth in Europe.

Japan

With the world's highest ratio of public debt to GDP and a history of two decades of stagnation, Japan is arguably the most challenging case. In fact, Japan runs a tight fiscal ship with one single exception: social benefits. Virtually every other part of government is being starved in order to pay for underfunded social benefits.

This is the result of an especially serious common-pool problem, which is built into the electoral system in a way that makes fiscal problems inevitable. Older voters, who are heavily over-represented in the current system of election districting, benefit while the young pay. This problem will persist until the electoral system is reformed.

Japan also suffers from the shortcomings of its budgeting procedures. It relies on a very loose 'contracts approach' to reconciling the interests of different political factions. Unfortunately, Japanese fiscal contracts are short-term, implicit and unenforceable. In addition, the budget suffers from a lack of transparency, which results in the absence of timely data on the true state of finances.

Finally, Japan has been able to finance its fiscal deficits only because net private saving is very large, and the key reason is deflation. Consumers and firms rationally wish to avoid investments in a deflationary economy. The stability of the government bond market is due in large part to deflation.

Solving Japan's fiscal problem requires a coordinated package designed to raise growth, end deflation, and cut entitlement spending.

It must start with reform to end the skew in Diet representation towards the elderly. Because the elderly live more densely in rural areas, redistricting would have to aim at a one-person-one-vote in both Houses of the Diet by taking about 20 seats away from the most rural districts and adding them to the most urban ones.

It will have to revive the budget-screening exercise of 2009–10 to keep the pressure of public scrutiny on spending items. *Ex post* scrutiny, with sanctions, must also increase, in order to strengthen incentives for achieving goals within budget limits. Needed accounting improvements include shifting public sector accounting to private sector principles and concepts, and shortening of the lags between the end of a fiscal accounting period and availability of accounts. Top-down discipline in setting budget content and execution must also be increased. The quickest approach would be to revive the Council on Economic and Fiscal Policy (CEFP), which has legal power to set budget priorities but was abandoned.

In healthcare, a binding budget constraint on spending is needed, especially in light of the sharp increase of the elderly over the next decade. One solution is to set an upper limit of taxation that supports healthcare. Should the funding prove inadequate at a given level of spending, then a national vote on raising the taxation limit would be triggered and a supermajority should be required to authorise higher taxes.

But fiscal reconstruction in Japan cannot be viewed as simply a matter of cutting spending or raising taxes. The best way to lower the debt/GDP ratio is by raising the denominator. This can be accomplished most effectively by policies to raise productivity and end deflation. Tax reform should be oriented toward

enhancing productivity growth by encouraging work and risk-taking. Regarding deflation, the Bank of Japan ought to adopt inflation targeting. Its current soft inflation target of 0–2% has no teeth. A shift towards a government-imposed inflation target of 1–3% would help, especially if the Diet should have the option to replace the management of the Bank should the target be missed.

All in all

Recent discussions of debt sustainability and fiscal consolidation have been motivated by crisis: markets are impatient, and time is short. While not denying the need for immediate measures to address immediate problems, this Report views the public debt situation from a longer-term perspective. Even if the immediate fiscal challenges confronting the advanced countries are successfully addressed, further challenges will emerge, as populations age and interest rates rise back toward more normal levels. Rather than remaining permanently in crisis-management mode, we ask what should be done to create an environment conducive to bringing public debts to a sustainable level. This Report provides some proposals.

1 Introduction and Overview

Chronic public-sector deficits and soaring debts are among the most pressing policy challenges facing the advanced economies. Even before the outbreak of the global financial crisis, fiscal burdens had grown heavy and doubts had developed about fiscal sustainability in the United States, Japan and Europe's heavily indebted countries.¹ In some countries like Italy, commentators highlighted what came to be seen as chronic deficit bias. In others like Finland, Sweden and Japan, deficits exploded and debt burdens soared as the result of costly banking crises.² In still others like the United States, deficits widened as a result of specific economic policy decisions taken in the course of the last decade.³

Whatever the precise nature of pre-existing problems, they were severely aggravated, without exception, by the global crisis of 2008–10. The crisis and the recession that followed cut into tax revenues and led to automatic increases in spending on, *inter alia*, unemployment benefits. The G20 countries agreed in early 2009 to a coordinated fiscal stimulus which, while limiting the severity of the global recession, widened deficits and raised debt burdens still further. The collapse of property prices and construction activity in the United States, Ireland and Spain, among other countries, led to banking crises whose costs ultimately ended up on governments' balance sheets.

The result has been to bring debt-to-GDP ratios in Europe, the United States and Japan alarmingly close or, in the cases of Japan and a subset of European countries, well beyond the critical 90% threshold where Reinhart and Rogoff (2010) have argued that sovereign creditworthiness and economic growth are at risk.⁴ Putting in place a credible plan for fiscal consolidation is now an urgent priority for the advanced economies.

The importance of that task becomes that much greater when one considers the future prospects for entitlement spending and economic growth. Cecchetti *et al* (2010), writing for the Bank for International Settlements, look several decades into the future. Extrapolating on the basis of current policy, they paint a terrifying picture of exploding deficits and crushing debts. The implication is that something that cannot continue indefinitely won't. Current policy will have to change.

1 For countries like Italy, these concerns go back all the way to the late 1980s: see for example Giavazzi and Spaventa (1988) and Dornbusch and Draghi (1990).

2 The contrasting experience subsequently of the Scandinavians on the one hand and Japan on the other shows how important growth is for bringing high debt burdens down – this is one of our themes in what follows.

3 This is a reference to the Bush tax cuts of 2001–2, more on which below.

4 Whether 90% is a magical threshold has, of course, been questioned (eg Irons and Bevin, 2010), and we will raise further questions about it below.

In this *Geneva Report* we provide a synthetic view of the fiscal situation in the advanced economies and the need for fiscal consolidation. We provide a general framework for understanding the sources of deficit bias and the obstacles to consolidation. In addition we present detailed studies of fiscal problems, their sources, and potential solutions in the United States, Europe and Japan.

This review and analysis render us sceptical of the indiscriminate application of rules of thumb for sustainable debt-to-GDP ratios, whether 90% or anything else. What level of debt is sustainable varies according to country circumstances. The advanced economies differ in their demographic outlooks, economic growth prospects, and the current and likely future extent of home bias on the part of investors. What is a sustainable debt burden and therefore the extent of the fiscal consolidation that is needed differ significantly across them as well.

We are similarly sceptical that there exists a single magic budgetary formula for successful fiscal consolidation. Where the proximate source of the problem is excessive government spending – as has historically been the case across much of Europe – successful fiscal consolidation will rely principally on expenditure cuts (as previous research on the continent has shown – see, *inter alia*, Alesina *et al*, 1998). Attempting to consolidate under these circumstances by raising taxes is likely to only stifle growth and fails to address the root of the problem. But where the proximate source of the problem is inadequate revenue – as is patently the case in the United States today – successful fiscal consolidation will have to involve revenue increases at least in part. Under these circumstances, attempting to consolidate through spending cuts alone runs the risk of depressing growth by cutting essential support for growth-supporting public goods (infrastructure repair, basic research, education and training). It is unlikely to be sustainable politically insofar as it entails deep cuts on basic social services likely to give rise to a political reaction once their effects are felt.

Appropriate institutional arrangements are critically important for the ability of a country to surmount the obstacles to consolidation. But different institutions work best in different circumstances, as we emphasise in Chapter 2. There is no single magic institutional solution for successful fiscal consolidation. Here, too, it is important to take national circumstances into account and avoid one-size-fits-all policy advice.

Throughout, we emphasise that fiscal policy creates a common pool problem. Financing public policies from general tax funds creates an externality: those individuals or groups enjoying the marginal benefit of an extra dollar spent on a project are not the same individuals or groups who bear the marginal cost of funding it. If they fully bore that cost, they would choose the level of spending that equates the marginal benefit and cost of funding. But since the two groups are not in general the same, those benefiting from a policy will tend to ask for higher levels of spending, since others pay the freight.

One can make precisely the same argument about tax cuts or tax expenditures. (Logically enough, since tax expenditures are just another form of budgetary spending.) Those enjoying the marginal benefit of a discretionary tax cut (or of an extra dollar devoted to specific tax expenditures) are not in general the same individuals or groups who bear the marginal cost of funding it through

the issuance and service of additional debt. This encourages different groups to lobby for cuts in taxes and increases in tax expenditures from which they benefit without fully internalising that society as a whole will have to pay for them, now or in the future.

It is not an accident that those who benefit from public-spending programmes are not, in general, those who pay for the policy; this pattern follows from the fact that fiscal policy is redistributive. But the purpose of addressing the common pool problem is not to counteract redistributive goals. It is to limit the adverse consequences of redistributive policies for the overall level of government spending, deficits and debt. It is to prevent the political process from favouring additional consumption today at the expense of future wealth, the implication being that there will be less consumption for future generations.

A variety of solutions have been proposed and tried for solving this common pool problem. These different solutions attack it in different ways, some by prohibiting or discouraging certain fiscal outcomes, others by structuring decision-making processes in ways that strengthen social relative to private costs and benefits.

It is useful to distinguish two broad classes of solutions: results-oriented approaches focusing on the outcomes of fiscal decisions, and procedural approaches focusing on the making of fiscal decisions. A first kind of results-oriented approach is constitutional numerical rules focusing on certain aspects of the budget. An example is the balanced-budget constraints and debt limits prevailing in many US states and Canadian and Argentine provinces.⁵ In practice there is a fair degree of variation in the structure of these rules. Balanced budget rules typically apply only to the current budget, the implication being that borrowing for capital expenditure is not forbidden. Some rules, while obliging the executive branch of government to present a balanced budget proposal to the legislature and (in some cases) requiring the legislature to pass a balanced budget, allow government borrowing *ex post*. Others require the government to offset any *ex post* deficit this year with surpluses next year.

A second kind of results-oriented approach is numerical fiscal rules that specify annual targets for key budgetary aggregates such as annual government deficits, debts, or spending.⁶ In contrast to constitutional rules, these numerical targets can be made conditional on the state of the economy, providing more flexibility.

Procedural approaches, in contrast, aim at structuring fiscal decisions such that the common pool externality is internalised by the relevant decision makers. They encourage decision makers to take a comprehensive view of the costs and benefits of all public policies and their funding. In practice, procedural solutions take two main forms: *delegation* and *contracts*. With delegation, significant agenda setting and enforcement powers are given to a central player in the budget process, usually the finance minister, who is expected to take a comprehensive view of the budget and to be less bound by the interests of individual constituencies than individual

5 For a discussion of balanced-budget constraints in the United States and other countries and their effects on fiscal performance, see von Hagen (1991), Fatas and Mihov (2003), Canova and Pappa (2005), Kennedy and Robbins (2001), and Kopits (2001).

6 For a discussion of general principles and the design of fiscal rules see Kopits and Symansky (1998) and Buiter (2003).

line ministers. With contracts, the budget process starts with a negotiation of targets for the main budgetary parameters among all participants and the leaders of all parties forming in the government; these targets are considered binding and effectively enforced during the remainder of the budget process. Here, it is the bargaining process that reveals the common pool externality.

Note that *delegation* is based on hierarchical structures among decision makers, while *contracts* are based on horizontal relationships. Thus, the two approaches are fit for different political settings. But while approaches differ, the underlying theme is the same. It is that chronic deficits and obstacles to fiscal consolidation arise when budgetary decisions fail to internalise the relevant externalities. A further theme, however, is that there is no appropriate one-size-fits-all policy advice. The same institutional reforms are not appropriate for distinctive national circumstances. Reforms must be tailored to the environment into which they are introduced.

One point that applies equally to the United States, Europe and Japan is that fiscal consolidation is easier with healthy and robust economic growth. Historically, most countries that have achieved a significant reduction in their debt ratios have done so, at least in part, by growing out of their debt burdens. Consolidation with growth is easier economically, since the denominator of the debt/GDP ratio will be rising, and because the revenue side of the revenue-expenditure equation will be contributing more to the solution of the problem. It is easier politically, since those making sacrifices today can look forward to higher living standards tomorrow. Fiscal consolidation is easier to bear, in other words, when it does not imply 'all pain and no gain'.

It is important therefore that fiscal consolidation should not be done in a way that dims the prospects for growth. Spending cuts that fall disproportionately on education, training and infrastructure, for example, are unlikely therefore to make for a durable solution.

Chapter 3 discusses fiscal challenges in the United States in more detail. Ten years ago, the USA was running federal budget surpluses equal to 2% of GDP, and projections showed surpluses persisting far into the future. The ratio of debt to GDP had fallen from 49% in 1993 to 33% in 2000, nearly undoing the increase in the debt from 26% to 49% that occurred in the 1980s. Today projections are for persistent deficits exceeding 6% of GDP, even after the economy has recovered from the recent recession. If current policies are continued, there will have been a worsening of the budget balance of more than 8% of GDP over a period of 15 years.

Roughly half of this fiscal deterioration happened prior to the Great Recession. Spending had increased because of wars in the Middle East and the homeland security expenditures introduced in the aftermath of the 11 September 2001 attacks. A new prescription drug programme for the elderly was enacted. At the same time, revenues were reduced by about 2% of GDP as a result of legislation passed in 2001 and 2003.

Further fiscal deterioration is now occurring for two reasons. First, spending on Medicare, Medicaid and Social Security is projected to grow by 3.5% of GDP as the baby boomers retire. Second, interest on the debt is projected to grow by

almost 3% of GDP, reflecting rising debt levels and the resulting higher interest rates. These rising debt levels are overwhelmingly the result of the direct effects of the Great Recession – of falling revenues and increased automatic stabiliser spending on programmes like unemployment insurance. Less than one-sixth of the rise in interest costs can be attributed to the Recovery Act and other stimulus efforts.

Three comprehensive proposals for fiscal consolidation have recently been released in the USA with the aim of reducing the deficit to no more than 3% of GDP by 2015 and stabilising the debt to GDP ratio at around 70%. While there is a broad consensus around the menu of policy changes that could achieve the necessary fiscal rebalancing, there is no clear path to the political deal that will be needed to enact the changes. It will be very difficult to achieve significant savings from retirement and health benefits by 2015, and significant cuts to discretionary spending are already incorporated into the baseline projections. Thus, it will almost certainly require additional revenue of approximately 2% of GDP to achieve the 2015 target. A compromise limiting tax expenditures appears to be the most viable approach to a bipartisan agreement, as Republicans can interpret this policy as reducing spending, while Democrats interpret it as raising revenue.

While we are optimistic that the US political system will be able to make the fiscal adjustments necessary to stabilise the debt-to-GDP level during the upcoming decade, there will then be further deterioration in the fiscal outlook between 2021 and 2035. Without policy changes, spending on retirement and health programmes is projected to increase by another 4% of GDP over that time frame. The challenging fiscal environment, in other words, is not going away.

Chapter 4 turns to Europe. Europe's public debt outlook has deteriorated because of population ageing and the global economic and financial crisis. The crisis raised European public debts by some 25–30% of GDP on average. While population ageing has not yet seriously impacted current debts, ageing-related public spending is likely to increase significantly as a share of GDP in coming decades. Absent corrective action, public debts are projected to rise from 59% to 128% GDP by 2035 – and much more for some countries.

The acuteness of this problem varies by country. The main determinant of that variation is pensions, which generally include a pay-as-you-go component with defined benefits. The larger the PAYGO component and defined benefits, the grimmer is the outlook. Public health spending also is expected to rise, but here the driving force is less demography and more problems of incentives and technology-related cost increases.

Europe also offers examples of successful debt stabilisation. In most of these cases (those of Finland, Ireland, Spain, Sweden), debt/GDP ratios fell because GDP grew faster than debt. This was sometimes possible because the heavily indebted countries were starting out well inside the technology frontier; they could grow quickly by catching up. From this point of view, it is a complication that most if not all European countries have now reached the end of the catch-up growth process and will have to focus on reducing their public debts or, at least, on ensuring that public debts grow significantly less fast than GDP, although

some countries (Greece, Portugal) could in principle rely on catch-up growth as part of their debt-stabilisation efforts.

Growth does not explain everything, however. Some countries have achieved impressive debt reductions despite growing slowly: examples include Belgium, Denmark and the Netherlands. Others, meanwhile, have allowed debts to grow even faster than GDP; Greece, of course, is the poster child for this problem.

Europe, therefore, offers a rich variety of situations that illustrate both successful and unsuccessful consolidations. It also provides a rich body of evidence on the role of budgetary institutions. In both Belgium and the Netherlands, for example, an independent committee evaluates budget plans before they are adopted. Italy halted its debt build-up in the 1990s by giving broad agenda-setting powers to the finance minister.

Achieving fiscal consolidation where it is most urgently needed will require European countries to further reform their budget processes. This will require explicit delegation or the adoption of contracts. The Stability and Growth Pact, again under revision, aims at strengthening the contractual approach and providing significant oversight from the EU. The Euro-plus pact would cover a wider range of objectives (adding measures of external competitiveness and putting more focus on the debt ratio) and specify mandatory deficit reductions. In addition, the decision-making process would become more automatic. While, so far, the Council would vote on a recommendation from the Commission, the new pact envisions that Commission recommendations would be considered as adopted unless a qualified majority of Council members oppose it.

The Pact, however, has not achieved its aims since 1999, largely because the contract is between each country and the EU (which represents the other countries). Since budget decisions ultimately rest in the hands of member states, it is local institutions that matter. It is local budgeting procedures that must be reformed, in other words, in order for hard choices to be made. Consistent with this fact, we would observe violations of the Pact have been relatively rare in countries that already have adopted the contracts approach domestically and had already implemented fiscal rules in that context.

However, the contractual approach may not work in each and every European country since, as noted previously, its effectiveness depends on local political circumstances. It works well in countries where governments are multi-party coalitions and electoral systems are competitive. In these circumstances fiscal contracts are enforced by the threat of breaking up the coalition when individual partners renege on the commitment to fiscal consolidation. European examples include the Netherlands and Sweden.

In contrast, where governments are typically formed by one party or by a coalition with no viable alternative partners, such enforcement does not work. In this case the government can decide to walk away from the promise of consolidation with no consequences for its survival until the next election. An example of this is Germany, whose violation of the Pact caused the 2005 reforms that watered down its rules. In such political settings, delegation of significant agenda-setting powers to the finance minister is required to strengthen the

commitment to fiscal consolidation. Other European examples of such settings include France and the United Kingdom.

The alternative, which implicitly underlies the one-size-fits-all approach, is a transfer of competence from member states to the EU or, more likely, to the Eurozone. While this need not be a complete transfer – it might only concern the debt path, leaving decisions on spending and taxes (and their size and composition) at the national level – many in Europe see this as a bridge too far.

Chapter 5 turns finally to Japan. We argue that solving Japan's fiscal problem requires a coordinated package designed to raise growth, end deflation, and cut entitlement spending. The last of these three elements, in particular, will require comprehensive reform of the electoral system and budgetary procedures that have resulted in low investment, chronic deflation, and overly generous entitlements over the years.

Our assessment, which may surprise many, is that Japan runs a tight fiscal ship except in the area of social benefits. As things now stand, virtually every other part of government – including defence, education, science and economic development – is being starved in order to pay for underfunded social benefits.

At the same time, Japan has an especially serious common-pool problem. This problem is built into the electoral system in a way that makes fiscal problems inevitable. Specifically, older voters are heavily over-represented in the current system of election districting. Thus it is no surprise that the old benefit, while the young pay. This problem will persist until the electoral system is reformed.

Japan also suffers from the shortcomings of its budgeting procedures. It relies on a very loose 'contracts approach' to reconciling the interests of different political factions. Japanese contracts are mostly short term, implicit and unenforceable. In addition, the transparency of budgeting is low and unlikely to rise soon.

Japanese fiscal policy also suffers from a lack of transparency. The absence of timely data on the true state of finances stems from multiple sources, among them:

- *Incomplete definition of government.* The standard presentation gives only a subset of the central government's accounts; an accurate presentation would focus on the 'general government' as defined in standard national accounts (ie central government, local government, and social security accounts consolidated).
- *Lax accounting standards.* The standard presentation is a mixture of operating, transfer, financing and capital transactions. An accurate presentation would break the government into 'business lines', such as operations (eg defence, foreign policy, education), social benefits (pensions, medical, etc), interest payments, and capital transactions.
- *Prevalence of off-budget items.* The standard presentation does not include the many 'special accounts' of the central government, much less similar accounts at local governments.
- *Recourse to supplementary budgets.* Japan adopts a 'supplementary budget' virtually every year. Basing the budget debate on comparison of initial budget in year t to initial budget in year $t - 1$ necessarily excludes such supplementary budgets, and thus distorts the debate.

Finally, fiscal reform plans lack specificity on how much is proposed in terms of tax hikes and how much in spending cuts. At one extreme, a solution with no tax hikes would require a cut of overall spending by about 20%. Social spending would have to fall from ¥104 trillion to ¥82 trillion. At the other extreme, with no spending cuts at all, the consumption tax would have to rise to 24%. One is reminded of the fiscal debate in the United States, where competing political factions similarly deny the need to address the problem simultaneously on both margins. In addition, the fiscal debate in Japan contains little mention of how fiscal reform plans will impact the economy for either Keynesian or supply-side reasons.

Even a casual glance at sectoral saving balances shows that Japan has been able to finance its fiscal deficits only because investment in the household sector has fallen, while savings in the corporate sector have far outstripped investment. The net savings of the corporate sector are attributable to deflation: firms rationally wish to avoid investments in a deflationary economy. Put another way, the stability of the government bond market is due in large part to deflation.

The way deflation ends, however, is critical to the outlook for bond market stability. If the elasticity of tax revenue to inflation is sufficiently high compared to the elasticity of bond yields to inflation, then an exit from deflation would lower fiscal deficits, and obviate the need for destabilising bond yield increases. If not, then a bond market crisis could occur. This makes early progress on fiscal consolidation all the more urgent.

Although the particulars of the US, European and Japanese cases are different, a common analytical framework can be used to understand the challenges they all face. It is to that framework that we turn next.

2 The Political Economy of Fiscal Consolidation

2.1 Introduction

Voters and their elected representatives generally prefer more spending and lower taxes. Without mechanisms to enforce a budget constraint, these preferences lead to a tendency toward budget deficits. Counteracting this tendency is a strong preference for a healthy economy. But since the adverse economic effects of deficits are not immediate, voters and their elected representatives tend to give them less than appropriate weight in their decisions.

In modern democracies, the vast majority of government spending is financed from a general tax fund to which all tax payers contribute. This includes government spending on social programmes that benefit individual, albeit large, groups in society like the elderly or those in need of more health care, and tax expenditures, that is, tax exemptions or benefits targeting certain groups in society. Because those who benefit from a given public policy do not bear the full burden of funding it, they tend to ask for more spending (or tax benefits) than they would if they did. Economists call this the *common pool* property of public finances. This property also concerns the revenue side. Voters would prefer to receive the benefits of public spending, but let others either in the current generation or future generations pay for those benefits.

The discrepancy between private and social benefits and costs of individual public policies is a source of excessive public spending similar to the problem of the excessive exploitation of common pool resources such as fisheries and environmental goods.⁷ The common pool property of public finances leads to excessive deficits and debts.⁸ As Kontopoulos and Perotti (1999) show empirically, the tendency to engage in excessive spending and incur excessive deficits and debt increases with the number of decision makers with access to the general tax fund. Ideological and ethnic divisions or ethno-linguistic and religious fractionalisation increase the tendency for those on one side of the divide in question to neglect the tax burden falling on the other side, further aggravating the common pool problem. Thus, empirical studies showing that such schisms result in higher spending levels, as well as deficits and debts, confirm the

⁷ See, eg, Hallerberg and Von Hagen (1999) and Hallerberg *et al* (2009).

⁸ See, eg, Von Hagen and Harden (1995), Milesi-Ferretti (2004), Velasco (1999).

importance of the common pool problem (Roubini and Sachs, 1989; Alesina and Perotti, 1996; Alesina *et al*, 1997; Annett, 2000). Good governance of public finances provided by appropriate fiscal institutions is necessary to reign in these tendencies and enforce a budget constraint on political actors.

Reducing excessive debt burdens and achieving the necessary fiscal consolidations present the same problem in reverse. Instead of benefits, pain must be distributed but – again – citizens, even if they favour fiscal adjustment in principle, would prefer that others bear the burden of the adjustment. Good governance and good fiscal institutions are necessary to make fiscal consolidations successful and lasting.

A variety of institutional mechanisms have been proposed for this purpose. In this chapter, we review and discuss these proposals as well as the empirical evidence and experience related to them in order to lay the ground for the subsequent country-specific chapters. We begin, in Section 2.2, with a more detailed explanation of the common pool problem and the role of the budget process. In Section 2.3 we then discuss the alternative institutional proposals.

2.2 The common pool problem of public finances and the budget process

Financing public policies from a general tax fund creates an externality: those enjoying the marginal benefit from an extra dollar spent on a project are not those bearing the marginal cost of funding it. If they did, they would choose the level of spending that equates the marginal benefit and cost of funding. But since the two groups are not in general the same, those who benefit from a policy tend to ask for higher levels of spending.

The fact that those who benefit are not those who pay for a policy is not an accident. It follows from the fact that fiscal policy is generally redistributive, either within or between generations. The purpose of addressing the common pool problem is not to counteract redistributive goals. It is to limit the adverse consequences of the common pool problem for the overall level of government spending, deficits and debt, and for the efficiency of resource allocation and economic growth.

The common pool problem of public finances manifests itself in a number of ways. The first concerns the decisions over public spending and taxation at a given level of government. Representatives of different political constituencies compete for financial resources and must reach a decision on the level of taxation and spending and the distribution of spending over a range of public policies. The larger is the number of decision makers and constituencies, the more serious is the common pool problem (Kontopoulos and Perotti, 1999). The more narrowly individual policies are targeted toward individual constituencies, the more pervasive the common pool problem becomes. This is the core of all pork-barrel programmes in modern democracies, where each representative of a local constituency wants to use general tax revenues to fund programmes benefitting

her own electoral district.⁹ Where constituencies are not defined geographically, as in many countries with electoral systems based on proportional representation, cultural, ethnic, and other divides among the population aggravate the common pool problem, since each constituency pays less attention to the fiscal burdens falling on the other.

A second manifestation of the common pool problem occurs when current government spending can be financed by borrowing, since this gives today's decision makers access to future general tax funds. If decision makers discount the future more heavily than capital markets, for example because of electoral uncertainty, the common pool problem leads to excessive deficits and levels of debt.¹⁰

A third manifestation concerns the financial relations between different levels of government (the central government and state governments in a federation, or the central government and municipal governments in unitary states). An important characteristic of these relations is the degree of vertical imbalance, that is, the ratio of spending at the lower level to the own tax revenue collected by lower-level units. The greater the degree of vertical imbalance, the more the sub-central units depend on revenues transferred from the central government. Such transfers give the lower units the opportunity to spend taxes collected from citizens in other parts of the federation or country. They distort policy decisions at the lower level toward excessive spending and toward spending on public consumption rather than investment. They invite strategic behaviour trying to extract more transfers from the higher-level government.¹¹ If the lower units can borrow from banks or capital markets, bailouts of over-indebted jurisdictions are a particularly pernicious form of vertical transfers.¹²

A variety of solutions have been proposed, and tried, to contain the common pool problem. They attack it in different ways, some by prohibiting or discouraging certain fiscal outcomes, others by structuring decision-making processes in ways that strengthen the weight of social relative to private costs and benefits. It is useful to distinguish two broad approaches, one focusing on the outcomes of fiscal decisions and one focusing on the institutions governing fiscal decisions. We examine these two broad approaches below, after setting some general requirements for proper budgetary practice.

2.3 The budget process: Comprehensiveness and transparency

In all modern democracies, a multitude of different interest groups and political constituencies compete for financial resources drawn from the general tax fund. The budget process is the constitutional and political framework within which this competition takes place. In a broad sense, the budgeting process describes how decisions regarding the use and funding of public resources are made.

⁹ The classical analysis of this problem is Wyplosz and Krogstrup (2010).

¹⁰ See Von Hagen (1996) and Weingast, Shepsle and Johnsen (1981).

¹¹ See, *eg*, Wildasin (1997) and Carreaga and Weingast (2000).

¹² See Rodden *et al* (2003) and Von Hagen *et al* (2000).

Budgeting institutions comprise the formal and informal rules and principles governing the budget process. They divide the budget process into different steps, determine who does what when, and regulate the flow of information among the various actors. In doing so, they distribute strategic influence and create or destroy opportunities for collusion and for holding individual agents accountable for their actions.

2.3.1 Four frequent deviations from comprehensiveness

For budgeting institutions to govern budgetary decisions appropriately, it is important that all claims on public financial resources are manifested and reconciled within the framework of the budget process. That is to say, the budget process must be comprehensive so that the full set of policy trade-offs are considered. In actual practice, however, there are five important deviations from comprehensiveness. Some of these deviations unambiguously weaken the cause of effective governance. Others have both advantages and disadvantages.

2.3.1.1 Off-budget funds

The first is the use of off-budget funds to finance government activities. In some cases, off-budget funding hides true spending levels from view in a way that can make it difficult to assess a nation's comprehensive fiscal situation. This is clearly a threat to effective governance.¹³ In other cases, particularly when off-budget spending is matched with a dedicated revenue stream, it can be a useful way to enforce pay-as-you-go discipline on a portion of spending like retirement benefits or transportation spending that might otherwise be particularly susceptible to the common pool problem. This would require a strict balance of revenues and spending for the off-budget fund, such that it neither receives nor pays transfers from or into the general tax fund. Even in the cases in which off-budget spending is combined with a dedicated revenue stream, it can have the effect of shielding that component of spending from the trade-offs involved in the annual appropriations process. Whether this is a good or bad thing will vary with the type of spending and the effectiveness of the particular country's annual appropriations process.

2.3.1.2 Automatic links

The second deviation from comprehensiveness is to tie expenditures included in the budget to developments exogenous to the budget process. Prime examples are the indexation of spending programmes to macroeconomic variables such as the price level or aggregate nominal income, and 'open-ended' spending appropriations such as the government wage bill and welfare payments based on entitlements with legally fixed parameters. These features shield beneficiaries from the risk associated with short-term economic fluctuations, allow present

13 A prime example for the use of off-budget funds comes from the national government in Japan, where the ordinary budget, the 'General Account' makes around 20% of gross total government spending and 32–40% of total spending net of transfers between the general and the special accounts (Von Hagen, 2006b).

and future beneficiaries to make economic decisions that depend on projections of future benefit levels, and streamline the budgeting process by not requiring complicated benefit programmes to be reassessed every year. But with no action-forcing event to require spending on these categories of programmes to be re-evaluated, they allow tough political decisions to be postponed (Weaver, 1986) and, as in the case with off-budget account, they shield large classes of spending from the trade-offs of the annual budgeting process.

2.3.1.3 Mandatory spending laws

The third deviation is inadequate distinction between laws outside the budget process that create the legal basis for the public policies pursued by the government and the budget law that authorises actual government expenditures for these policies. In most modern democracies, legislative processes differ for the former and the latter type of laws. When ‘mandatory spending laws’ – laws outside the budget law that make certain government expenditures compulsory during the fiscal year – are used, they too circumvent the trade-offs of the annual spending process. Some spending programmes are sufficiently complicated that they require stand-alone authorisation acts to establish programme parameters. But except in cases where mandatory funding is justified to protect beneficiaries from risk, the authorisation and appropriation functions should be separated and the funding for programmes should be set as part of the annual budget process.

A particularly egregious version of making budget decisions outside the budget process is when politicians attach ‘riders’ or ‘earmarks’ to laws requiring the government to spend funds on certain projects. This practice can lead to extreme versions of the common pool problem in which legislation is constructed to include ‘something for everyone’. This practice also undermines merit-based allocation of funds by the executive branch, although it is occasionally argued that legislators may be better able to identify high value spending in their districts than can a centralised bureaucracy. On the other hand, many political processes have a strong status quo bias, and it can be necessary to grease the wheel of the legislative process simply to enact policies with social benefits that exceed social costs. Thus, policies are sometimes advocated that limit log-rolling rather than eliminate it altogether, for example by capping the fraction of the budget that can be earmarked.

2.3.1.4 Contingent liabilities

The fourth deviation occurs when the government assumes contingent liabilities such as guarantees for the liabilities of other public or non-public entities. Implicit or explicit promises to bail out sub-national governments (as in Germany in the late 1980s), regional development banks (as in the past in Brazil), financial institutions (as in the Savings & Loan debacle of the 1980s in the United States, and in the recent financial crisis in the USA and Europe) can suddenly create large government expenditures outside the ordinary budget. Even more run of the mill credit market activities such as offering loan guarantees to small businesses or to support the construction of nuclear power plants can create future liabilities. Since government by its very nature serves as social insurance,

contingent liabilities cannot be completely avoided, and properly accounting for them in the budget is difficult. However, their existence and implications for the government's financial position can be brought out by requiring the government to report on the financial guarantees it has entered into. In particular, the government should account for explicit guarantees by scoring the expected loss to the budget up front at the time the contractual guarantee is entered into.¹⁴

2.3.1.5 Supplementary budgets

Another aspect of comprehensiveness is that decisions made within the budget process should be binding throughout the period for which the budget applies. This requires tight limits on changes in the original budget once that period has begun. Specifically, it means that the use of supplementary budgets should be limited. Where supplementary budgets during the fiscal year become the norm, as in Italy and Belgium in the 1980s and Germany and Japan in the 1990s, one cannot expect policymakers to take the constraints embedded in the budget process. Of course, governments need some flexibility to adapt spending and revenues to unforeseen events and developments during the year. However, such changes should be governed by the same rules and procedures as the initial budget law.

2.3.2 Transparency

For the budget process to discipline fiscal policy, it must be transparent. According to Kopits and Craig (1998), transparency in the budgeting process 'involves ready access to reliable, comprehensive, timely, understandable and internationally comparable information on government activities ... so that the electorate and financial markets can accurately assess the government's financial position and the true costs and benefits of government activities...'. Poterba and Von Hagen (1999) argue that special accounts and the failure to consolidate all fiscal activity into a bottom-line measure reduce transparency. Alesina and Perrotti (1996) include misleading macroeconomic forecasts, new and unfamiliar policies, and creative accounting as additional factors reducing transparency. The availability of information linking budgetary figures to the national accounts is another prerequisite of transparency. More generally, the budget should not allow policymakers to hide expenditures or use them for purposes other than those stated in the executive's budget proposal and authorised by the legislature.

Another aspect is procedural transparency. Budgeting should be transparent in the sense that all actors know what they and others are expected to do. Opaque processes for bargaining and conflict resolution promote log-rolling and reciprocity and obscure the responsibilities of the actors involved. Alt and Dreyer-Lassen (2006) identify four dimensions of procedural transparency. First is the number of separate documents in which a given amount of information is processed; the larger this number, the lower the degree of transparency. Second is the ability of outsiders to independently verify the data and assumptions in the budget. Third is a commitment to avoiding opaque and arbitrary language,

¹⁴ This has been the practice in the United States since the Federal Credit Reform Act of 1990.

including the use of generally accepted accounting standards. Fourth is the provision of explicit justifications of the data and explanations of the assumptions underlying the budget.¹⁵

2.4 Results-oriented approaches

A first approach to mitigate the common pool problem is to directly limit its impact on deficits and debts. Two main arrangements exist. The first one constrains budgetary decisions to fit within explicitly stated limits and make these limits binding by enshrining into high-level legislation, possibly the Constitution. The second category of arrangement establishes numerical targets, which need not be limits, to be achieved over various horizons.

2.4.1 Constitutional or legal limits

A first, prominent kind of results-oriented approach is *ex ante* numerical rules focusing on certain aspects of the budget. An example is the balanced-budget constraints prevailing in most US states and many Canadian and Argentine provinces.¹⁶ In practice there is a fair degree of variation in the structure of these rules. Balanced budget rules typically apply only to the current budget, the implication being that borrowing for capital expenditure is not forbidden. This is often called the ‘Golden Rule’. Some rules oblige the executive branch of the government to present a balanced budget proposal to the legislature and (in some cases) the legislature to pass a balanced budget but allow government borrowing *ex post*. Others require the government to offset any *ex post* deficit with surpluses the next year. In some US states, special referenda are required to authorise government borrowing. In the European Union, member states must avoid ‘excessive deficits’, which is commonly interpreted as keeping their annual government budget deficits below 3% of GDP and their government debts below 60% of GDP. Germany, Italy, Japan and the Netherlands introduced rules requiring balanced current budgets after World War II to enhance the credibility of their macroeconomic stabilisation programmes. Since the late 1990s, the UK government has been required to balance its current budget on average over the business cycle. The US federal government operates under a nominal debt ceiling that limits the dollar amount of debt it can issue. In Switzerland a constitutional amendment called the *debt brake*, adopted in 1998, required the federal government to balance the budget by 2001 and to set annual ceilings for federal government expenditures afterwards. A similar rule was put into the German constitution in 2009. It requires a balanced budget from the Federal Government after 2016 and from the state governments after 2020. *Debt brakes* as

15 Alt and Dreyer-Lassen operationalise their approach and calculate indexes of transparency that facilitate international comparisons.

16 For a discussion of balanced-budget constraints in the USA and other countries and their effects on fiscal performance, see Von Hagen (1991), Fatas and Mihov (2003), Canova and Pappa (2005), Kennedy and Robbins (2001), and Kopits (2001).

a class of fiscal rule require the government to maintain a balanced budget over the cycle and provide a legal basis for calculating the latter.

The advantage of such limits is their specificity. They spell out exactly what a government can and cannot do. But this specificity is also a drawback, insofar as it limits the flexibility with which fiscal policy can be used to respond to unforeseen events. Thus, the question of whether or not balanced-budget rules keep states in the US from responding efficiently to revenue and expenditure shocks has been the subject of considerable debate (eg, Fatas and Mihov, 2003; Canova and Pappa, 2005). Similarly, the political debate over the EU's fiscal framework in the first years of European Monetary Union (EMU) focused largely on the question to what extent it prevents governments from smoothing taxes and expenditures over the business cycle. This approach may thus have a cost in terms of the efficiency of fiscal policies and that cost may undermine the credibility of the rules in question. The experience of EMU suggests that governments will ignore the limits if they perceive this cost to be very large. Very stringent constitutional or legal limits may lack credibility precisely because they are so strict. Credibility requires some flexibility to react to unexpected developments. However, too much flexibility obviously implies that the rule no longer effectively constrains political agents. It follows that constitutional and legal limits on deficits and debt embody a trade-off between effectiveness and credibility.

One way of addressing this issue is by conditioning what governments are allowed to do on the state of the economy. The need to balance the budget might be stated in terms of the cyclically adjusted budget deficit rather than the actual deficit, or a deficit or spending limit might be stated as a ratio of potential rather than actual GDP. Such contingent limits would require smaller deficits and spending during cyclical upswings while allowing larger deficits and more spending in downswings, in this way allowing for the operation of the automatic stabilisers built into the tax and transfer system. This approach may be subject to credibility problems of its own, however, since the cyclical component of GDP and government spending and revenues is not easily determined in real time, when fiscal policy decisions have to be made.¹⁷

The attractiveness of constitutional or legal limits stems from their simplicity. Once the limit is in place, it is straightforward to measure the government's performance against it, or so it is argued.¹⁸ Empirical evidence suggests, however, that the effectiveness of such limits is often questionable. For example, US state governments subject to stringent numerical debt limits tend to borrow using debt instruments not covered by the legal rule, resulting in no discernible impact on total debt (Strauch, 1998; Von Hagen, 1991). Kiewiet and Szakaly (1996) find that state governments subject to more restrictive borrowing constraints tend to substitute municipal for state debt. Fatas *et al* (2003) find that the deficit limits of the EMU did not constrain deficits in the large member states. Von Hagen and Wolff (2006) show that the member states of the EMU have regularly used

17 For example, Mills and Quinet (2002) report OECD estimates of the output gap in France for 1995. The 1995 estimate was below -3.0%, while the 1999 estimate was -0.5%.

18 Historically, in fact, such approaches were often imposed by voters responding to fiscal crises and rising taxes that were perceived to be the result of the profligacy of their political representatives. See, eg, Eichengreen and Von Hagen (1996), Millar (1997), and Alm and Skidmore (1999).

creative accounting to circumvent the 3% deficit limit. The European public debt crisis started in 2009 with the revelation that the Greek government had used creative accounting massively to hide deficits far in excess of what was deemed allowable. In US states, constitutional expenditure limits tend to shift spending from the (constrained) current budget to the (unconstrained) capital budget (Strauch, 1998). Rueben (1997) and Shadbegian (1996) find no significant effect of tax and expenditure limits on the level of spending in a cross-section of US states. In sum, the finding of all this research is that the effectiveness of results-oriented approaches is limited because rules can be circumvented.

2.4.2 Fiscal rules

Fiscal rules specify numerical targets for key budgetary aggregates such as annual government deficits, debts or spending.¹⁹ Typically the goal of such rules is to improve fiscal discipline and reduce government deficits and debts.

The Fiscal Consolidation Agreement adopted in Japan in 1981 is an early example: it set annual targets for the growth of major spending aggregates; for details see below. In 1996, the Japanese government then adopted a new rule – its so-called Fiscal Restructuring Targets – and in 1997 the Fiscal Structural Reform Act set annual spending targets for several years.

The US Congress adopted a fiscal rule in the Balanced Budget and Emergency Deficit Control Act (Gramm-Rudman-Hollings Act I) of 1985, establishing numerical targets for the federal budget deficit for every fiscal year through 1991. These targets were later revised and extended by the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 (Gramm-Rudman-Hollings Act II), which effectively postponed the goal of balancing the budget to 1993. The Budget Enforcement Act of 1990 then eliminated the deficit targets and replaced them by nominal ceilings on annual discretionary spending. At the same time it introduced a number of reforms of the annual budget process to strengthen the enforcement of the targets (Peach, 2001).

In Europe, the Stability and Growth Pact (SGP) introduced the concept of fiscal rules at the national level. The SGP requires governments to submit annual Stability Programmes to the European Commission, in which they set targets for the main budgetary aggregates for the current and the following two years and explain how they intend to reach the targets in question. The targets must be consistent with the medium-term budgetary objective of keeping the budget close to balance or in surplus.

The government of Canada enacted fiscal rules for 1991–2 to 1995–6 under the Federal Spending Control Act (Kennedy and Robbins, 2001). These targets limited annual spending under all federal programmes except those that are self-financing. In New Zealand the Fiscal Responsibility Act of 1994 set out principles of prudent fiscal management promoting accountability and long-term fiscal planning. Although the Act does not require this explicitly, New Zealand governments have defined specific numerical targets for public debt under the

¹⁹ For a discussion of general principles and the design of fiscal rules see Kopits and Symansky (1998) and Buitier (2003).

new fiscal regime. Similarly, the Australian government has operated under self-imposed targets for net public debt since 1998 (Kennedy and Robbins, 2001; Hemming and Kell, 2001). The Convergence, Stability, Growth and Solidarity Pact adopted by the member countries of the West African Economic and Monetary Union also contains numerical limits for fiscal aggregates.²⁰

The effectiveness of fiscal rules for keeping government deficits and debts in check is questionable for much the same reasons as the effectiveness of constitutional or legal limits on deficits or debts. Neither in the USA nor in Japan (Von Hagen, 2006b) did the governments stick to the rules consistently. In Canada, Australia and New Zealand, the fiscal rules seem to have been adopted only after the start of and the first successes of fiscal consolidation programmes. In these countries, the rules may have served more as a signalling device to demonstrate the governments' commitment to fiscal consolidation to financial markets than as a constraint on budgetary policies.

In Europe, the rules of the SGP have contributed little to fiscal discipline on average in the EU or the Eurozone. At a closer look, it turns out that the performance of individual countries has been very different since the introduction of the SGP. Some countries consistently violated the limits set by the SGP and the annual fiscal targets they defined under their annual Stability Programmes. These include in particular Germany, Italy and France. Other countries showed consistent commitment to the limits and annual targets. As Hallerberg *et al* (2009) show, the latter group consists of those countries that had already adopted a practice of setting multiannual fiscal targets as part of their budget institutions (see below). Von Hagen (2006b) shows that there is a strong correlation between the commitment to the SGP rules and the commitment to a budget process of the contract type that focuses on numerical targets for the main budgetary parameters. Thus, the European experience suggests that an internationally imposed fiscal rule requires a strong anchoring in domestic budgetary institutions to be effective. This observation leads us to the role of budgeting institutions.

2.5 Budgeting institutions: Designing the budget process

The institutional design of the budget process aims at structuring fiscal decisions such that the common pool is internalised by the relevant decision makers to the greatest possible extent. To this end, it aims at inducing decision makers to take a comprehensive view of the costs and benefits of all public policies and their funding. In practice, institutional design takes two main forms: *delegation* and *contracts*. *Delegation* is based on hierarchical structures among the decision makers, *contracts* are based on horizontal relationships.

20 See Kennedy and Robbins (2001), Emmerson and Frayne (2002), Dore and Masson (2002). Daban *et al* (2001) provide a description of fiscal rules in a variety of countries.

2.5.1 Delegation

Under delegation, one key player in the budget process, usually the finance minister, is vested with strong agenda setting power relative to the other players. During the initial phase of the budget process, the role of this player is to monitor the bids of others, negotiate with them directly, and determine their overall budget allocations. At the legislative stage, the delegation approach assigns agenda-setting powers to the executive over parliament. An important case in point is provisions limiting the scope of amendments that parliamentarians can make to the executive's budget proposal, for example allowing only amendments that reduce spending or add new revenue sources. Such restrictions cause the budget constraint to be felt more powerfully. Furthermore, the executive may control the voting procedure and force the legislature to vote the entire budget (or large parts) up or down. It may make the vote on the budget a vote of confidence, which similarly raises the stakes. Where two houses of parliament exist, the delegation approach limits the budgetary authority of the Upper House where the executive typically has less control.

At the implementation stage, the delegation approach gives the finance minister the ability to monitor and control the flow of resources during the budget period, for example through the authorisation of disbursements and the imposition of cash limits during the budget period. Effective monitoring and control are also important to prevent other actors from behaving strategically, by for example spending their appropriations early in the period and demanding additional funds later under the threat of curtailing important public services.

2.5.2 Fiscal contracts

Under the contract approach, the budget process starts with a set of binding fiscal targets negotiated among ministers. Emphasis here is on the bargaining process as a mechanism for revealing the externalities involved in budget decisions and on the binding nature of the targets. Often, these targets are derived from medium-term fiscal programmes or coalition agreements. The finance minister's role is then to evaluate the consistency of the individual spending bids with these targets.

At the legislative stage, this approach places less weight on the executive as agenda setter and more on the legislature as monitor of the implementation of fiscal targets. The information rights of the legislature are typically more powerful than under the delegation approach, and parliamentary committees reflect the interests of the spending departments.

At the implementation stage, the contract approach resembles the delegation approach in emphasising the monitoring and control powers of the finance minister. However, the contract approach achieves flexibility to react to unforeseen budgetary developments less by giving the finance minister managerial discretion and more by setting up contingent rules for dealing with such events. The fiscal targets negotiated at the initial stage of the budget process are often backed up by precise prescriptions for how to deal with unexpected revenue and expenditure shocks. An example is Belgium's 'Golden Hamster', the

rule that any unexpected surpluses in the budget arising from unexpectedly high revenues or low expenditures must be used to pay down the national debt.

2.5.3 Effectiveness

The effectiveness of both approaches to reign in excessive debts and deficits has been demonstrated in what is now a large body of literature.²¹ Empirical studies have covered the EU (Von Hagen, 1992; Von Hagen and Harden, 1994b; Hallerberg *et al*, 2008), EU accession countries (Gleich, 2008; Yläoutinen, 2004), Asian emerging markets (Lao-Araya, 1997), Latin American countries (Alesina, Hommes, and Stein, 1997; Eichengreen *et al*, 1999), and state governments in the US (Strauch, 1998). The empirical evidence clearly shows that institutions which induce decision makers to internalise the common pool externality of public finances have significant, negative effects on public sector deficits and debts.

What does this research say about the recent build-up of large piles of public debt in Europe? Portugal and Greece are no surprises to this literature, as both have been consistently shown to be among the countries with the weakest budgetary institutions in Europe. Ireland comes as a surprise, though, as Ireland has one of the best-designed budget processes in the EU (Hallerberg *et al*, 2008). Importantly, however, the source of the recent surge in debt is different in Ireland compared to Greece and Portugal. While the latter consistently had problems controlling their fiscal flows during the last decade, Ireland did not. Instead, the Irish surge in debt resulted from the government's bailout of the country's largest banks. The lesson from the Irish – and other European countries' – recent experience, therefore, is that the design of budgetary institutions must pay greater attention to how governments deal with conditional and hidden liabilities.

2.5.4 Institutional choice

What determines the choice between delegation and contracts? While the former relies on hierarchical structures within the executive and between the executive and the legislature, the latter builds on a more even distribution of authority within government. In democratic settings, hierarchical structures typically prevail within political parties, while relations between parties are horizontal. This suggests that the key to the institutional choice between the two approaches lies in the number of parties in government.

In parliamentary systems, delegation is an appropriate approach to centralisation for single-party governments, while contracts is the proper approach for multiparty coalition governments (Hallerberg and Von Hagen, 1999). There are two reasons for this. First, members of the same political party are more likely to have similar political views regarding basic spending priorities. Disagreement will mainly result from the common pool problem – that is, from the perceived cost of distributive policies. In coalition governments, in contrast, cabinet members are likely to have more divergent views regarding the distribution of government spending over different groups of recipients.

²¹ See Hallerberg *et al* (2009) for an extensive review of this research.

Agreeing on a budget therefore requires compromise between coalition partners. For a coalition government, delegation of strategic powers to the finance minister would create a new principal-agent problem, as a strong finance minister might abuse his or her powers and unduly promote the political interests of his or her own party. Thus, governments formed by two or more parties are more likely to opt for the contracts approach.

Second, delegation and contracts rely on different enforcement mechanisms. In one-party governments, the ultimate punishment for a spending minister reneging on the budget agreement is dismissal from office. This punishment is heavy for the individual minister who overspends but light for the government as a whole. It can be used because the prime minister is the strongest cabinet member in most one-party governments and has the authority to select and replace cabinet members. In coalition governments, in contrast, punishments are not easily applied to defecting ministers. The distribution of portfolios is set by the coalition agreement. The prime minister cannot therefore easily dismiss intransigent spending ministers from parties other than his or her own, since doing so would be an intrusion into the internal party affairs of coalition partners.

The most important punishment mechanism in coalition governments is the threat of dissolving the coalition if a spending minister reneges on the budget agreement. This punishment is heavy for the entire coalition, since it can cause the fall of the government. The point is illustrated by the fact that fiscal targets are often part of coalition agreements. But the credibility of this enforcement mechanism hinges on two important factors. The first is the existence of alternative coalition partners. If there are other potential partners with whom the aggrieved party can form a coalition, the threat of leaving the coalition is clearly more credible than if no potential partner is available. The second factor is the expected response of the voters, as a coalition may be broken up with the anticipation of new elections.

These different enforcement mechanisms also explain the different relations between the executive and the legislature in the legislative phase of the budgeting process. Single-party governments typically arise in two-party settings such as pre-1994 New Zealand, the United Kingdom and the United States, where each party is large and party discipline is low. Although the ruling party enjoys a majority, the main concern at the legislative stage of the budgeting process is to limit the scope of defections from budget proposals by individual members who wish to divert government funds to their own electoral districts or personal objectives. Multiparty coalitions, in contrast, typically arise in settings where parties are small and homogeneous and where party discipline is strong. In this situation, defections from the budget agreement are a lesser concern, but each party in the coalition will want to watch carefully to be sure that the executive sticks to the coalition agreement. Compared to the contracts approach, the delegation approach therefore makes the executive a stronger agenda setter in parliament, while the contracts approach gives greater monitoring powers to the legislature.

Finally, the commitment to fiscal targets embedded in the contracts approach is not credible for one-party governments. Consider a single-party government with a weak prime minister and weak finance minister. Assume that this government

announces a set of fiscal targets at the outset of the budgeting process and that spending ministers then renege on the agreement during the implementation phase. Other cabinet members cannot credibly threaten defectors with dissolving the government, since this would amount to punishing themselves. Absent a credible threat, the cabinet would just walk away from the initial agreement.

In sum, the contracts approach is more effective in countries where coalition governments are the norm and the elections are competitive, while the delegation approach is more likely to be found in countries where governments are formed by a single party or the electoral process is not competitive. Coalition governments are the norm under electoral regimes of proportional representation, which allow even small parties to gain seats in the legislature. In contrast, single-party majority governments are the norm under majoritarian electoral regimes, which favour the emergence of a small number of large parties. Empirical research confirms this conjecture (Hallerberg *et al*, 2008).

The reliance of the contracts approach on fiscal targets bears a close resemblance to the use of fiscal rules as discussed above. This is particularly true if the annual fiscal targets are derived from multiannual fiscal agreements. Indeed, the experience with fiscal rules in the EU has shown that governments following the contracts approach have applied the rules-based fiscal framework of the SGP more consistently and stringently than governments relying on the delegation approach. This suggests that the effectiveness of fiscal rules depends strongly on the internal organisation of a country's government. Such rules should not be expected to work independently of the institutional design of the budget process.

The above reasoning applies to European-style parliamentary democracies. Presidential democracies like the US differ in that presidents do not rely directly on the legislature for their position. Voters can support a president from one party while denying that party a majority in the legislature. Coordination of budgetary decisions between the executive and legislative branches is more difficult for obvious reasons when the president and the majority are from different parties.

The role of the executive in the budgeting process is not that different in presidential and parliamentary systems. In presidential systems, the structure of administration lends itself more to delegation. The relationship between the executive and legislature, however, is more difficult in that the two are conceived to be more equal than in parliamentary governments. Designing the budget process in presidential systems thus must recognise two institutional dimensions. One is the internal organisation of the legislature, where strong agenda-setting powers can be created by elevating the position of the speaker and creating a hierarchical committee structure. The Budget Enforcement Act passed under the first Bush administration in the early 1990s, for example, reformed congressional procedures designed to protect decisions about budgetary parameters negotiated at the budget summit between the president and the legislature against later modifications.

The second dimension is the relation between the executive and the legislature. The greater the extent to which the constitution places the two institutions on an equal footing, the more that budget agreements between the two must rely on fiscal targets as under the contracts approach.

2.5.5 Fiscal Councils

While the delegation and the contract approach refers to the design of the budget process within the executive and legislative branches of the government, recent proposals calling for the creation of fiscal councils suggest to add another player to the budget process which is neither part of the executive nor of the legislature. Such proposals have been made by a number of economists,²² and some countries have indeed established institutions along these lines.²³ For example, the agreement between the European Commission and the government of Romania contains language suggesting the creation of an independent fiscal council.²⁴ IMF staff have supported the idea in the context of reforming the Stability and Growth Pact.²⁵ In the UK the Conservative Party has launched the Office for Budget Responsibility as an independent fiscal policy watchdog.²⁶

Proposals for fiscal councils cite three justifications: improving the transparency and predictability of the public finances, strengthening the long-term orientation of fiscal policy, and overcoming distributional conflicts. Wren-Lewis (1996) and Jonung and Larch (2006) argue that governments have an incentive to bias economic forecasts and that the uncertainty surrounding economic forecasts is too large to detect such biases. They propose an independent forecasting body with a mandate to deliver the medium- and long-term economic forecasts necessary for formulating a fiscal policy strategy over the business cycle.²⁷

Annett (2005) and Annett *et al* (2005) recommend fiscal councils as part of a strategy to strengthen the Stability and Growth Pact. Such councils would provide independent assessments of fiscal policies, together with the macroeconomic and fiscal projections underlying the budget planning process. The fact that they would report to their national parliaments would strengthen the involvement of legislatures in the budgeting process and improve parliamentary control over the executive. Leeper (2009) argues that the effectiveness of discretionary fiscal policies depends critically on the public's expectations of future policies; he concludes that, as in the case of monetary policy, more predictable future policies would enhance policy effectiveness. He suggests that independent fiscal forecasts could achieve better predictability.

The second justification for fiscal councils starts from the notion that fiscal policy decisions are excessively influenced by short-sighted political concerns and inadequately shaped by the need to stay within the government's intertemporal budget constraint. Blinder (1997) and Gruen (1997) propose an independent institution patterned after the Federal Reserve Board with the authority to set tax policies. Wyplosz (2005) sees an independent fiscal council as a solution

22 See, eg, Eichengreen *et al* (1999), Wyplosz (2002, 2005, 2008), Blinder (1997), Wren-Lewis (2002), Leith and Wren-Lewis (2005); Annett (2005), Khemani (2007), Leeper (2009).

23 See the cases listed below.

24 Memorandum of Understanding between the European Community and Romania, signed 6 May 2009, p. 3, available at http://ec.europa.eu/economy_finance/publications/publication15409_en.pdf

25 eg Annett (2005), Annett *et al* (2005), Schadler (2005).

26 See http://news.bbc.co.uk/2/hi/uk_news/politics/8401517.stm. Debrun *et al* (2009) provide an overview of the various proposals.

27 In the USA the Congressional Budget Office (CBO) performs this role, providing a separate set of economic projections that are released at approximately the same date as those in the president's budget. If the projections in the president's budget differ too much from those of the CBO, the Administration incurs a cost in terms of credibility.

to the time-inconsistency problem that arises from the tension between the commitment to long-run fiscal discipline and the desire to pursue short-run macroeconomic stability. Arguing in a Latin American context, Eichengreen *et al* (1999) and Ter-Minassian (2002) suggest that an independent fiscal council could help countries ameliorate the procyclicality of fiscal policies in the region.

Alternatively, an independent fiscal council could focus narrowly on macroeconomic stabilisation. It could be designed to minimise its interference with other aspects of fiscal policy, especially those with prominent distributional aspects. Wren-Lewis (2002) and Leith and Wren-Lewis (2005) advocate independent fiscal councils with a mandate that extends only to the conduct of countercyclical fiscal policies and that entails the authority to use a small set of taxes for that purpose. This would assure that any distributional consequences of the council's decisions would be at best temporary.²⁸ Similarly, Gruen (1997) proposes an independent fiscal authority with a mandate to balance the budget over the cycle using a general tax indicator that changes all tax rates simultaneously while leaving the tax structure to be determined by political authorities. Ball (1997) advocates an independent fiscal council with a similar mandate and the authority to change only income tax rates.

The third approach (Von Hagen and Harden, 1994b; Hausmann *et al*, 1999; Fatas *et al*, 2003; Wyplosz, 2002, 2008) views fiscal councils as instruments for achieving a degree of coordination in the decisions of the different actors in the budget process. In these proposals, the fiscal council has the authority to set and enforce annual deficit limits to assure the sustainability of public finances. The important difference between the second and third approach is that, in the former, the FPC is in charge of macroeconomic stabilisation. In the latter, in contrast, the fiscal council is in charge of assuring that fiscal policy remains within the intertemporal budget constraint, which is only a necessary condition for optimal policy. The task of identifying and implementing optimal policy would then be left to the government.

Two types of actual existing fiscal councils can be distinguished. One primarily carries out the function of increasing the transparency of the budget process by reporting publicly on budgetary developments and commenting on or providing the economic forecasts underlying the government's fiscal plans. Examples are the Federal Planning Bureau (FPB) in Belgium, the Central Planning Bureau (CPB) in the Netherlands, the Hungarian Fiscal Council (which was recently dissolved by the national government), the Slovenian Fiscal Council, and the Swedish Fiscal Council.

The second type of fiscal council is those that possess real decision-making power in the budget process. These include the Public Debt Committee in Austria, the High Council of Finances (HCF) in Belgium, the Australian Loan Council, the Indian Finance Committee, and the Nigerian Fiscal Responsibility Commission. These councils are typically staffed with politicians representing the central and state governments, whereas the members of the first group are typically

²⁸ Leith and Wren-Lewis (2005) argue that this might be politically acceptable in light of the fact that the use of short-term interest rates in the conduct of monetary policy by an independent central bank has distributional consequences too.

independent experts. The task of the second type revolves around setting limits onto the spending and borrowing of subnational governments.

So far, there is no systematic research concerning the effectiveness of fiscal councils, yet. Jonung and Larch (2006) suggest that fiscal councils that serve to increase transparency lead to better quality fiscal and economic forecasts used in the national budget processes. Anecdotal evidence suggests that fiscal councils in Belgium and India had some positive effect on fiscal discipline. Apart from that, however, the data are still too scant to identify a significant contribution of fiscal councils to fiscal discipline.

3 The United States: Can the 1990s Fiscal Rebalancing Be Repeated?

3.1 Introduction

For more than 35 years, it has been evident that the 2011–20 period would be one of fiscal stress in the United States as the baby-boom generation retired. The US government has been making 75-year projections of its health and retirement programmes for many years, and as early as 1974, these projections showed spending increases similar to the ones that are in fact occurring.²⁹

In 1983, the US government instituted policy changes to prepare for this fiscal challenge, setting revenue levels for its main retirement and disability insurance programme significantly above spending levels – with the explicit purpose of reaching our current point in history with a lower debt-to-GDP level than would otherwise have occurred. Facing large deficits in the early 1990s, the US adopted a formal ‘pay-as-you-go’ policy to prevent further fiscal deterioration in advance of the retirement of the baby boomers. This policy required that any tax cuts or permanent new spending be offset so as to be deficit neutral or deficit reducing. When budget surpluses emerged in the late 1990s, President Clinton articulated a ‘save Social Security first’ policy of dedicating the budget surpluses to debt reduction in advance of the baby boomer’s retirement. The US House of Representatives endorsed this general approach in 2000, voting 381–3 to use the portion of the budget surplus attributable to Old-Age, Survivors, and Disability Insurance (OASDI) and Medicare for debt reduction. Between 1993 and 2001 federal debt as a share of GDP fell from 49% to 33%.³⁰

29 Detailed 75-year projections of the Old-Age, Survivors, and Disability Insurance programme are available beginning in the 1960s, though projections for the year 2050 were already being made in the 1950s. The 75-year projections for the Medicare Hospital Insurance Trust Fund began in 1983.

30 US budget policy discussions tend to focus on federal government debt (central government debt), as state and local debt is determined by the decentralised decisions of hundreds of jurisdictions. Over the past 30 years, state and local government debt has fluctuated in a narrow range of 12% to 18% of GDP and thus changes in state and local debt have not been of macroeconomic significance. But in comparing US debt levels to gross government debt numbers from other countries, it is necessary to add about 15% of GDP to the federal numbers discussed in this chapter. Like the federal government, state and local governments have made pension and health care promises that cannot be met without new revenues or reductions in other spending.

The US commitment to preparing for the retirement challenge dissolved during the 2001–7 period as the pay-as-you-go law was permitted to lapse in FY 2002. Tax cuts of roughly 2% of GDP were enacted without offsetting spending reductions. A significant new social insurance programme, subsidising the purchase of prescription drugs for the elderly and costing approximately 0.4% of GDP, was introduced, also without offsetting financing. In addition, spending increased for the security and war-fighting expenses of the post 9/11 period, with no new revenue collected for this purpose. In total, the fiscal balance worsened by about 4% of GDP, from surpluses that averaged 1.7% of GDP from 1999 to 2001 to deficits averaging 2.5% of GDP during the post-9/11, pre-recession years of 2003–2007.

Today rising health and retirement costs associated with the ageing of the baby boomers and rising interest costs attributable largely to the direct fiscal impact of the deep recession are leading to further deterioration of the fiscal outlook. Projections are for persistent deficits exceeding 6% of GDP in the coming decade, even after the economy has recovered from the 2007–9 recession. Policy debates are focused on how to reduce the deficit to 3% of GDP over the medium term so that the ratio of debt to GDP can stabilise at roughly 70%. While there is a broad consensus around the menu of policy changes that could achieve the necessary fiscal rebalancing, there is no clear path to the political deal that will be necessary to enact the changes.

This chapter begins by reviewing the deterioration in the US fiscal outlook over the 2000 to 2011 period. Next it discusses the outlook for stabilising the debt-to-GDP ratio over the coming decade, and then turns to longer-term issues. It concludes with a discussion of the political economy of fiscal consolidation in the US.

3.2 The deterioration in the fiscal outlook

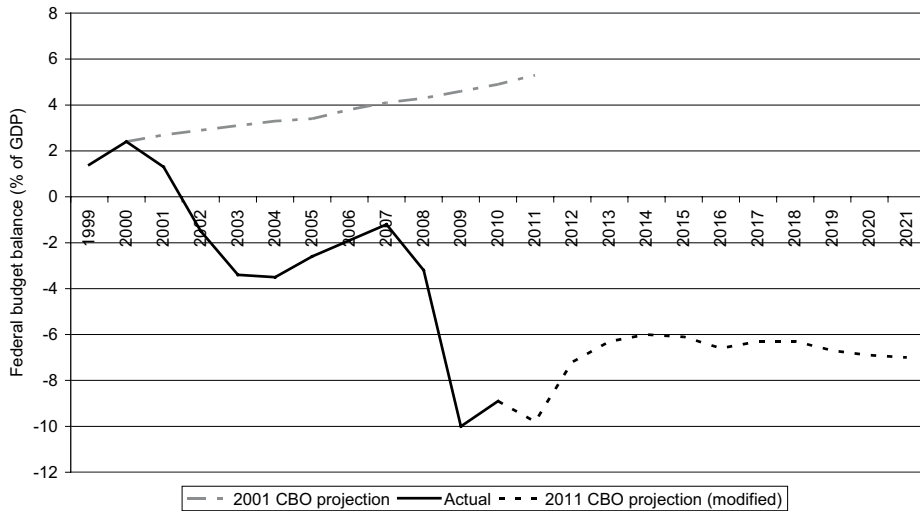
Ten years ago, the US was running federal budget surpluses equal to 2% of GDP, and projections showed surpluses persisting far into the future. Debt-to-GDP had fallen from 49% in 1993 to 33% in 2000, nearly undoing the increase in the debt from 26% to 49% that had occurred during the presidencies of Ronald Reagan and George H.W. Bush. Policymakers were actively debating the implications of the US paying down all of its publicly held debt, raising questions such as whether financial markets could tolerate a world without US Treasury bonds and whether the US government should use surpluses to acquire private sector assets so that it could continue to issue debt to the public.³¹

Today, projections are for persistent deficits exceeding 6% of GDP, even after the economy has recovered from the 2007–9 recession. Figure 3.1 shows the Congressional Budget Office's 10-year budget projections made in January 2001, the actual path of the deficit during that decade, and a projection for deficits in

31 For a discussion of the 1990s emergence of budget surpluses see Elmendorf *et al* (2002).

the coming decade if current policies are continued.³² The figure reveals that if current policies are continued, there will have been a worsening of the budget balance of more than 8% of GDP over a period of 15 years.

Figure 3.1 The deterioration of the US budget outlook



Source: CBO (2001) and CBO(2011).

Notes: Projection assumes that the 2001/2003 tax cuts are made permanent, other expiring tax provisions are extended, the AMT continues to be indexed for inflation, and the scheduled 20 percent cuts in Medicare payments to doctors do not occur.

Table 3.1 shows that roughly half of the fiscal deterioration happened prior to the recession. Discretionary outlays increased by 1.3% of GDP between 1999–2001 and the pre-recession years of 2003–7 primarily because of spending associated with the wars in the Middle East and the increased homeland security expenditures in the aftermath of the 11 September 2001 attacks. Mandatory spending rose by almost 1% of GDP as a new prescription drug programme for the elderly was enacted, health expenditures continued to rise, and refundable tax credits (scored as outlays) were expanded. Neither the security spending nor the new drug programme was accompanied with any significant offsetting spending cuts or revenue increases. Moreover, revenues were reduced by about 2% of GDP via legislation passed in 2001 and 2003. This tax legislation reduced marginal tax rates at all income levels, reduced the preferential tax rates that apply to dividends and capital gains, and expanded middle-class tax expenditures such as child tax credits. The weaker than expected economic performance of this period also contributed to the 2.7% decline in revenue as a share of GDP. To a large

³² The projections for the coming decade assume that the 2001/2003 tax cuts are made permanent, other expiring tax provisions are extended, the Alternative Minimum Tax is indexed for inflation, and the scheduled 20% cut in Medicare payments to physicians does not occur.

extent, the fiscal deterioration of this period was a replay of the incompatible security spending and tax-cutting policies of the Reagan years.

Table 3.1 Components of US federal spending (share of GDP)

	1999-2001	2003-2007	2021
Social security, Medicare, and Medicaid	7.5	8.0	11.5
Interest	2.3	1.5	4.4
Discretionary spending	6.3	7.6	6.7
Other mandatory	2.3	2.6	2.8
Total outlays	18.3	19.8	25.4
Revenues	20.0	17.3	18.4
Surplus	1.7	-2.5	-7.0
Unemployment rate	4.3	5.2	5.2

Source: Congressional Budget Office (2011) with baseline modified to extend current tax and Medicare policies.

Before turning to the further deterioration that is projected for the coming decade, it is necessary to discuss the several alternate budget projections that are available for the US. The most widely used projections are those of the non-partisan Congressional Budget Office (CBO), an independent budget agency established by Congress in 1974. The CBO is required to make its projections based upon 'current law'. In particular, if a tax cut or spending programme is scheduled to expire, the CBO assumes in its projections that the policy will indeed expire. This convention has enabled policymakers to mask the true out-year deficit impact of policies by scheduling policies to expire even though they are intended to be permanent. The 2001/2003 tax cuts were scheduled to expire after 10 years for this reason. A large set of business tax preferences expire and are renewed annually, masking their out-year impact on the deficit. In addition, Congress annually indexes the income-thresholds for the alternate minimum tax for inflation, but only for one year at a time, which again obscures the out-year deficit impact. Finally, Congress has legislated a 20% reduction in payments to doctors under Medicare. Every year this cut is undone for the current year only – allowing Congress to spend money without showing the out-year deficit impact.

Table 3.2 shows three sets of budget projections for the next decade. The first row contains the official CBO baseline projection which includes the effects of the budget gimmicks described above. Under these unrealistic assumptions, deficits in the second half of the decade level off at approximately 3% of GDP and the debt-to-GDP ratio is stabilised. The second row adjusts the CBO projections to extend current tax and Medicare policies, producing current policy projections similar to those that Auerbach *et al* (2003, 2006) have produced in the past. Under these 'current policy' assumptions, deficits in the second half of the decade average 6.6% of GDP. The final row shows deficits under the President's February 2011 budget proposal. This projection shows deficits of around 3% of

GDP in the second half of the decade. The Administration's projections start from a baseline that is about 1% of GDP more favourable than the CBO projections, largely due to different assumptions about labour force growth and interest rates. As is discussed below, the Administration's projections also incorporate about 2% of GDP worth of specific deficit reduction measures relative to the current policy baseline.

Table 3.2 Three projections of the US budget balance

	2001	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
CBO January 2011 baseline	-9.8	-7.0	-4.3	-3.1	-3.0	-3.4	-3.1	-2.9	-3.2	-3.2	-3.2
CBO January 2011 adjusted	-9.8	-7.2	-6.3	-6.0	-6.1	-6.6	-6.3	-6.3	-6.7	-6.9	-7.0
President's February 2011 budget	-10.9	-7.0	-4.6	-3.6	-3.2	-3.3	-3.0	-2.9	-3.0	-3.1	-3.1

Returning to Table 3.1, we see that the deterioration in the 'current policy' budget outlook from the pre-recession period has two components. First, spending on the big social insurance programmes, Medicare, Medicaid, and Social Security, is projected to grow by 3.5% of GDP over this period as the baby boomers retire. Second, interest on the debt is projected to grow by almost 3% of GDP, reflecting rising debt levels and the resulting higher interest rates. These rising debt levels are overwhelmingly the result of the direct effects of the recession – of falling revenues and increased automatic stabiliser spending on programmes like unemployment insurance. Less than one-sixth of the rise in interest costs can be attributed to the Recovery Act and other stimulus efforts.³³

Much of the budget debate in Washington this year has been focused on setting a level for the 30% of spending that is appropriated annually – so-called discretionary spending. Table 3.1 shows that under CBO projections, this component of spending is projected to fall from 7.6% of GDP in the pre-recession years to 6.7% of GDP in 2021. In his budget, the President proposed freezing non-security discretionary spending at its 2010 nominal level for five years and to allowing it to grow with inflation thereafter. This, along with timely withdrawals of troops from Afghanistan, would result in overall discretionary spending in 2021 of approximately 6.0% of GDP. Congressional Republicans have been arguing for further reductions in non-security discretionary spending beyond what the President has proposed. Republicans largely achieved these objectives in the recent debt limit agreement which set caps on discretionary spending that would reduce such spending to about 5.5% of GDP by 2021, not

³³ There are two reasons why the stimulus policies have had only a negligible impact on the budget outlook. First, they were much smaller than the direct fiscal impact of the recession. The direct effects of the recession raised the deficit from about 2% of GDP to about 8% of GDP. The stimulus programmes raised deficits by another 2% of GDP to 10%. Second, the duration of the stimulus programmes was limited. In contrast, the direct fiscal effects of the recession started earlier and will continue to persist until the economy returns to full employment.

counting any spending for operations in Afghanistan and Iraq that may still be necessary at the end of the decade.

3.3 Prospects for medium-term fiscal consolidation

In his February 2010 budget submission, President Obama set a medium-term fiscal target of bringing the primary (non-interest) budget into balance by 2015, thereby stabilising the debt to GDP ratio at 'an acceptable level once the economy recovers'. This target implies reducing the deficit to approximately 3% of GDP and, with nominal GDP growth projected to average 4.4% in the second half of the decade, stabilising the ratio of debt to GDP at approximately 70%.

The President's February 2010 budget made specific policy proposals to reduce the deficit to approximately 4% of GDP by 2015 and established a bipartisan National Commission on Fiscal Responsibility and Reform charged with completing the job of identifying the policies necessary to stabilise the debt to GDP ratio by 2015 and with examining 'policies to meaningfully improve the long-run fiscal outlook' (Office of Management and Budget, 2010). In December 2010, 11 of the 17 members of the fiscal commission, including five Democrats, five Republicans, and one independent voted to approve the commission report (National Commission on Fiscal Responsibility and Reform, 2010). This vote tally was smaller than the 14 votes necessary to trigger a vote on the proposal by Congress. Another bipartisan group of fiscal experts released a separate set of recommendations in November 2010 (Debt Reduction Task Force, 2010). The President's February 2011 budget contains specific proposals that would reduce the deficit to 3.2% of GDP by 2015. Thus, there are now three comprehensive plans for achieving fiscal sustainability. These plans illustrate both the menu of options available for achieving a fiscal rebalancing as well as the challenges that will make it difficult to enact the necessary reforms.³⁴

The plans of both the Fiscal Commission and the Bipartisan Policy Center go beyond the President's 3% of GDP target for 2015, reducing the 2015 deficit to 2.3 and 1.2% of GDP respectively. Thus these plans propose not only to stabilise the debt-to-GDP ratio at 70%, but also to put it on a downward trajectory in the second half of the decade. There is both a substantive reason and a strategic reason to aim for a 2015 deficit target below 3% of GDP. The substantive reason is that stabilising the debt-to-GDP ratio at 70% would leave the country with less than the ideal amount of flexibility to respond to future economic shocks. The strategic reason is that in order to make it through the legislative process, proposals will likely need to become less stringent. Thus a proposal that starts out by reducing the 2015 deficit to 2% of GDP is likely to be enacted as a proposal

³⁴ Two less comprehensive frameworks for deficit reduction have recently been released. The first, from House Republicans, proposed to reduce marginal tax rates for high-income taxpayers and pay for the tax cut with unspecified base broadening. It also proposed deep cuts in discretionary spending and replacing the current single payer health care system for the elderly with a system in which seniors would purchase health insurance from private insurance companies using vouchers whose value would grow at only the economy wide inflation rate (significantly below the historic growth rate of health care costs). The second, a new proposal from President Obama, proposed additional budget cuts beyond those included in the budget proposal he released in February.

that reduces the deficit by an amount closer to 3% of GDP. Put another way, all three plans contain components that are very unlikely to be enacted.

To see why it will be difficult to enact policies stabilising the deficit at 3% of GDP by 2015, it is helpful to refer once again to Table 3.1. In 2021, about two-thirds of government spending will be for interest costs, Social Security, Medicare and Medicaid. And these categories of spending are projected to account for more than 100% of the increase in spending since 2003–7. But the amount of spending cuts achievable in these categories during the 5 to 10 year horizon for stabilising debt to GDP is quite limited. Spending on interest costs can be affected only indirectly. Social Security is often described as the third rail of US politics ('touch it and you die'). It is funded with a dedicated revenue stream, and the solvency of the system is generally judged on a 75-year basis. Social Security reform proposals almost always phase in benefit cuts and tax increases very slowly so as to exempt current retirees and near-retirees from benefit cuts and current workers from immediate tax increases. Thus, even a fiscally responsible Social Security reform that was projected to produce long-run financial stability for the programme would likely do little to improve the medium-term fiscal outlook.

It will similarly be challenging to make a significant dent in Medicare and Medicaid spending over the medium term. The 2010 Affordable Care Act (ACA) included \$455 billion in spending reductions in these programmes over the coming decade. In theory, it would be possible to 'double down' on the cost savings provisions in the ACA, for example, by accelerating some of the payment reforms that are currently scheduled to be rolled out gradually as pilots. In practice, Republicans are trying to repeal many of the provisions of the ACA, and it will be challenging to maintain the cost savings that have already been legislated, much less to introduce significantly more aggressive policies to reduce costs.

The limited role that reducing mandatory spending is likely to play in stabilising debt to GDP over the medium term can be seen in the three frameworks for fiscal consolidation that were described above. The deficit reduction achieved by 2015 from reforming Social Security in the two fiscal commission plans is 0.10 and 0.03% of GDP respectively. The President's budget does not propose changes to Social Security, though the President has expressed support for improving Social Security's financial status. On health care, the two commission plans propose about 0.2% of GDP in health care related deficit reduction. The President's budget proposes an even smaller amount. Overall, achievable savings on the mandatory side of the budget over the coming decade are likely to be around 0.5% of GDP and even those savings assume reforms to Social Security and increased Medicare premiums for seniors that have not been politically feasible in the past.

With policy adjustments of approximately 3.5% of GDP necessary to reach fiscal sustainability targets and only around 0.5% of GDP of adjustment likely to come from mandatory spending, the remainder will need to come from discretionary spending and increases in revenue. As noted above, discretionary spending is projected in the CBO baseline to decline from the 7.6% of GDP of the pre-recession years to 6.7% of GDP by 2021. The recent debt limit agreement set caps on discretionary spending that would reduce such spending to about

6.2% of GDP by 2021. This number includes 0.7% of GDP worth in spending for operations in Afghanistan and Iraq that may not be necessary by the end of the decade.

Whether the cap levels will actually be achieved is unknowable. The conventional wisdom about the discretionary caps of the 1990s is that when they were set at 'reasonable' levels, Congress and the President abided by the caps. But when, toward the end of the decade, the caps were set at implausibly low levels, the appropriations process simply ignored the caps.

Overall, while there are conceivable scenarios in which spending reductions exceeding 2% of GDP are achieved by the end of the decade, it seems more likely that the political process will produce savings in the range of 1.0 to 1.5% of GDP. Moreover, the savings achieved by 2015 are likely to be toward the low end of this range. This observation implies that additional revenue of at least 2% of GDP will be needed by 2015 to stabilise the deficit at 3% of GDP.

There are three main approaches to raising revenue that are currently receiving significant attention in the US, all of which could raise 2% of GDP in additional revenue. The first approach is to let the 2001/2003 tax cuts expire as scheduled in 2012. Doing so would raise roughly 2% of GDP in new revenues and has the political economy benefit of not requiring policy action. If Congress and the President simply do nothing and let the tax code revert to what it was during the booming 1990s, the US will have accomplished about two-thirds of the policy change necessary to stabilising its debt to GDP ratio. Doing nothing, however, is unlikely to be politically feasible. The Republican Party is committed to making the tax cuts permanent and President Obama favours extending these tax cuts for taxpayers with incomes below \$250,000. It is almost certain that the 2012 presidential election campaign will provide an opportunity for both parties to harden their commitments to extending these tax cuts.

The second approach to raising revenue is to broaden the tax base by reducing tax expenditures. The US tax code excludes many items from taxation that would be included in an ideal income tax base – for example, compensation received in the form of employer provided health insurance is not taxed. It also contains expensive tax deductions for items like mortgage interest and state and local taxes paid. Finally, it administers spending-like programmes through the tax code, such as tax credits for college tuition. Cutting back on tax expenditures offers the opportunity to raise revenue without raising tax rates, while simplifying the tax code and, in some cases, eliminating the economic inefficiencies that come from the deviations from the ideal tax base. The challenge here is that most of the largest tax expenditures are quite popular. Thus, recent discussion has focused on the possibility of allowing most of the existing tax expenditures to remain, but capping the total amount of tax expenditures that a taxpayer may claim. This approach is likely to be more politically feasible than attempting to directly eliminate any specific tax expenditure.

The third approach is to introduce a Value Added Tax (VAT) to supplement existing revenue sources (the US is the only OECD country without a VAT). Because Americans are accustomed to paying retail sales taxes assessed by state governments and because the VAT has negative connotations of being associated

with European social welfare states, proposals for a US VAT generally describe it as a 'national retail sales tax'. In the short term, the VAT appears much less likely to be enacted than the other two revenue approaches. The idea has received little serious discussion outside of academia and think tanks and would be perceived as more radical by most Americans. Moreover, Democrats tend to be wary of a VAT because of progressivity concerns, while Republicans tend to worry that it is too efficient a tax and could therefore lead to bigger government.

It is, of course, possible to combine the three approaches to raising revenue. The President's budget proposal would allow the 2001/2003 tax cuts to expire for income ranges above \$250,000, while limiting tax expenditures both by capping the rate at which itemised deductions can be claimed and by eliminating subsidies for fossil fuel production. The two fiscal commission proposals aggressively cap tax expenditures and overshoot their revenue target so as to allow marginal tax rates to come down. The Bipartisan Policy Center proposal includes a 6.5% 'Debt Reduction Sales Tax' as well.

In general, the political feasibility of revenue increases is no greater than that of the more aggressive spending cuts. In particular, a large fraction of Republican elected officials have publicly committed to opposing any tax increases. However, there are two considerations that may make it possible to achieve an increase in revenue. First, the fact that the 2001/2003 tax cuts are scheduled to expire creates some ambiguity about what qualifies as a tax increase. While most Republicans are clear that they would view the expiration of the tax cuts as an impermissible tax increase, others such as Feldstein (2010) have simultaneously argued against tax increases while cautioning against extending the tax cuts before there is more clarity about the fiscal outlook. Second, because tax expenditures can be interpreted as government spending that occurs through the tax code, there appears to be a real opportunity for a bipartisan agreement on tax expenditures that would allow Republicans to claim that they are reducing this large category of government 'spending' and Democrats to claim that they have managed to increase government revenue.

3.4 The longer-term outlook: Demographics and health care expenditures

Even if the US is successful at stabilising the debt to GDP ratio within the next 5–10 years, longer-term fiscal challenges associated with population ageing and rising health care expenditures will remain.

The US has a more favourable demographic outlook than many European countries. The US total fertility rate has averaged slightly above two for the past 20 years, and current projections from the OASDI actuaries are for a long-run fertility rate of 2.0. With immigration rates projected to continue to exceed one million per year, the US labour force is projected to increase by 0.5% per year between 2019 and 2050 (OASDI Trustees Report, 2010).

As discussed above, the retirement of the baby boom generation is leading to a dramatic rise in social insurance spending. But the demographic burden is

projected to stabilise within the next 15 years. The number of workers per OASDI beneficiary is falling from 3.3 in 2007 to 2.3 in 2025. But beyond 2025, this ratio falls very gradually – reaching 2.1 in 2065. OASDI spending as a share of GDP is rising from 4.2% in 2007 to 5.8 in 2025. Between 2025 and 2065 expenditures on these old age and disability benefits are projected to remain nearly constant – reaching only 5.9% of GDP in 2065 (OASDI Trustees Report, 2010).

Thus the main long-term fiscal challenge comes from health care costs. Since 1975, expenditures per beneficiary on the two main government health care programmes, Medicare and Medicaid, have grown at an average annual rate of 2% faster than per capita GDP. The CBO projects that federal spending on health programmes and OASDI will increase by 4% of GDP between 2021 and 2035. By comparison, the primary deficit in 2021 under the ‘current policy’ scenario is 2.6% of GDP.³⁵

There is, of course, nothing wrong with a society choosing to spend a greater fraction of its income on health care over time. With rising income levels it is possible to simultaneously spend a rising fraction of income on health care and increase consumption of non-health care goods and services (Hall and Jones, 2007). Moreover, research suggests that the benefits of increased health care spending in the US have exceeded the cost (Cutler *et al*, 2006). Nonetheless, there are reasons to believe that a significant portion of US health care consumption is inefficient (Garber and Skinner, 2008) and the extent to which US health care spending exceeds that of other countries is extraordinary even after adjusting for levels of per capita income (Reinhardt, 2008). Even if rapidly increasing health care spending were optimal, it would still create a fiscal challenge. Since about half of US health care spending is government financed, such a path would imply steadily increasing tax rates.

In recent years, health care experts in the US have suggested a long list of changes to eliminate inefficiencies in the system (Engelberg Center for Health Care Reform, 2009). These include moving the payment regime away from paying based on the quantity of services delivered and instead paying on a capitated basis, or based on measures of health care quality outcomes. They also include investing more in learning about the clinical effectiveness of different treatments and pricing unproven treatments differently than proven ones. And they also include streamlining administration, eliminating the tax incentive to overconsume health insurance, reforming the medical malpractice system, standardising insurance plans to facilitate quality and price-based competition, and investing in health information technology and electronic medical records. The 2010 Affordable Care Act (ACA) contained elements of all of these recommendations, though in many cases only in a pilot form. The CBO estimates that the ACA reforms will reduce the deficit by over \$1 trillion in its second decade of operation. Some health care experts think that with proper implementation, these reforms could produce much greater savings (Cutler,

35 We focus here on the primary deficit because when unsustainable fiscal trajectories are extended far into the future, interest costs dominate the overall deficit, and it becomes hard to judge the size of the necessary policy adjustment. Under the assumption that revenues and non-health, non-OASDI spending remain a constant share of GDP, then the primary deficit will grow from 2.6% of GDP to almost 7% of GDP between 2021 and 2035.

2010). Other experts suggest that many of the cost savings provisions will not be politically sustainable and will be repealed before they go into effect (Holtz-Eakin and Ramlet, 2010).

Many countries use hard budget caps to limit health care spending, setting aggregate budgets at the provincial or hospital level and requiring providers to deliver care within that cap. A plan based on this philosophy is currently being promoted by Representative Paul Ryan, the Republican chair of the House Budget Committee, along with Alice Rivlin, one of President Clinton's budget directors. The Ryan–Rivlin plan would replace the current US system of government-provided health insurance for seniors with a new system in which Medicare recipients would receive a voucher and purchase insurance from private insurance companies. Under the Ryan–Rivlin plan, the vouchers, and therefore Medicare costs per beneficiary, would grow at $GDP + 1\%$, essentially cutting excess cost growth in half. Under this system, seniors would bear the risk associated with health care costs growth exceeding $GDP+1$ as they would be responsible for paying the portion of the insurance premium that was not covered by the voucher.³⁶

Most likely the coming decade will be one of messy innovation in the US health care system, as different states use the flexibilities and financial incentives provided in the Affordable Care Act to try different approaches to cost control and quality improvement. In the US, state governments are often described as the laboratories of democracy, since successful innovations demonstrated in one state can be expanded nationwide. So long as at least a few states find a way to reorganise to provide higher quality care at a lower cost, it is likely that the Affordable Care Act approach of learning what works and testing different payments systems will continue to be the main approach to health care cost control for the US. However, if excess cost growth persists at 2% a year for another decade, then the blunter approach of directly setting expenditure levels could emerge as a politically viable alternative.

3.5 The political economy of reform

There is relatively recent precedent for the US correcting a fiscal imbalance. From 1982 through 1997, the US faced what appeared to be an intractable budget deficit problem. It required three pieces of deficit reduction legislation – in 1990, 1993 and 1997 – each of which reduced deficits by approximately 1% of GDP, along with the good fortune provided by a booming economy, to turn the persistent budget deficits into surpluses. None of the budget deals were easy. The tax increases in the 1990 deal required President George H.W. Bush to renege on his 'read my lips, no new taxes' pledge and contributed to his electoral defeat in 1992. President Clinton's 1993 budget, which also included higher taxes, passed Congress without a single Republican vote. Several of the first term Democratic

³⁶ Representative Ryan has recently released a new plan, no longer supported by Alice Rivlin, in which the vouchers would grow only with inflation. Vouchers growing at inflation would increase in nominal terms by about 2% a year. Vouchers growing at $GDP+1$ would grow at about 5.5% per year.

members of Congress who voted for the 1993 deficit reduction package lost their seats in the 1994 election. The path to the 1997 budget deal involved a three-week government shut down in December 1995.

Elmendorf *et al* (2002) note a key difference between the unsuccessful efforts at deficit reduction during the 1980s and the successful efforts during the 1990s. The Gramm-Rudman-Hollings deficit reduction law of 1985 set explicit annual deficit targets that declined to zero over several years, but it did not specify the policy actions to achieve the deficit reduction. When the target proved too difficult to meet in 1987, the targets were raised. Starting in 1990, however, deficit reduction efforts included specific actions to reduce the deficit rather than a set of deficit targets. The lesson that unrealistic deficit reduction targets are unlikely to bind policymakers was learned a second time in the late 1990s. While discretionary spending caps were an important component of the 1990 and 1993 budget legislation, when caps were set unrealistically low in the 1997 budget agreement, they were simply ignored.

For much of the year, policymakers in Washington have been trying to decide whether to try to make a serious effort at fiscal consolidation before the November 2012 elections or whether instead to spend the next 18 months trying to lay the ground work for a budget deal in early 2013. While a successful fiscal consolidation would eliminate the risks associated with financial markets becoming impatient with the lack of progress, a failed effort could exacerbate market concerns. Moreover, an attempt to address contentious fiscal issues in the heat of the 2012 election campaign could result in responsible options being taken off the table and could fail in a way that made reaching a compromise in 2013 more difficult. Perhaps the strongest argument for trying to address the medium-run fiscal imbalances now is that doing so could create a climate in which the additional short-term fiscal stimulus that the US economy so badly needs becomes politically feasible.

The debt limit agreement reached in August sets up a dynamic that both allows for one more attempt at a grand fiscal bargain between Democrats and Republicans before the November 2012 election and intensifies pressure for an agreement right after the election. It requires Congress to pass legislation by 15 January 2012 reducing the deficit by \$1.2 trillion over 10 years. If Congress fails to produce \$1.2 trillion in savings, automatic spending cuts go into effect beginning in 2013 to achieve the \$1.2 trillion in savings. The automatic spending cuts were explicitly designed to be unappealing to both Democrats and Republicans, so as to increase the costs of failing to come to an agreement. Thus, there will be a set of negotiations this autumn, similar to those that occurred this summer, aiming at a fiscal agreement. If these negotiations fail, then, after the November presidential election, the confluence of the start of a presidential term, the imminent (31 December) expiration of the 2001/2003 tax cuts, and the desire to prevent the automatic spending cuts will set the stage for a post-election agreement.

3.6 Conclusion

The policy adjustments that are needed for the US to stabilise its debt-to-GDP level over the next decade are not large relative to policy adjustments that have occurred in the recent past. For example, simply reversing the tax cuts and increased war spending of the past decade would be sufficient. It is uncertain, however, whether the political system will find a way to enact the needed adjustments before the 2012 election. The harder problem is rising health care expenditures. Finding the right long-term mix of cost-reducing reforms and additional revenue will occupy US policymakers far beyond the point when the current fiscal imbalance is corrected.

4 Europe's Public Debt Challenge

4.1 Introduction

Many in Europe have been stunned by the fact that developed countries, too, can face the wrath of financial markets if they do not keep their fiscal houses in order. Yet, European countries are no strangers to high public debts. For nearly two decades, some countries have sported public debts in excess of 100% of GDP. Just before the financial crisis, the public debts of Eurozone countries amounted to 70% of GDP on average, more or less the same level as when the euro was launched, and 10 percentage points higher than in the early 1990s. Since 2007, debt ratios have increased by 10–60% of GDP. Obviously, bringing debts down is not part of the European tradition, with the exception of only a few countries that were able to outgrow their debts as the result of their catching-up processes.

To make things much worse, Europe's population is ageing quickly, a process that has long been in the making and that is now picking up speed. The resulting, implicit fiscal liabilities are gradually becoming explicit, potentially adding another 30–40% to the debt/GDP ratio. A safe conclusion is that nearly all European countries will have to devote the next two decades to rolling back their public debts to levels that allow for comfortable interest service and permit occasional deficits in the face of unexpected shocks, including recurrent cyclical downswings, without triggering a wave of crises. Unfortunately, budgetary institutions are not designed to deliver such a massive and sustained rollback in most countries. In spite of the current debt crisis, public opinion and governments are largely in denial of the problem. Political parties show themselves unwilling or unable to take the measures that need to be taken.

This chapter starts with a review of the debt build-up before the financial crisis to argue that the deficit bias, a consequence of the common pool problem presented in Chapter 2, has been commonplace in Europe. The chapter next examines the upcoming fiscal implications of population ageing. There is no lack of information about the seriousness of the issue, including at the official level. Since 2001, the European Commission occasionally conducts a coordinated study of the demographic evolution and its budgetary implications in the member

countries.³⁷ This chapter relies on the latest results (European Commission, 2009) to present an evaluation of this part of the debt challenge.

Then the present chapter looks at the legacy of the financial and economic crisis that started in 2007. It shows that public debt increases have been uneven throughout the Eurozone. Unsurprisingly, they have been the largest in the three countries currently under IMF-EU programmes (Greece, Ireland and Portugal) but other, larger, countries (Spain and France) do not stand far behind.

Sections 4.5 and 4.6 look at what could be done. It argues that, with few exceptions, growth is unlikely to play a significant role in bringing down debt ratios in Europe. The challenge will have to be met with better policies, which will require better incentives to policymakers, not just for a couple of years, but for the very long run. Looking at the margins of adjustment, it seems that public spending rather than tax revenues will have to bear the largest burden, mainly because taxes already impose high deadweight losses in most European countries. While debt monetisation and inflation are unlikely to be condoned by the ECB, the crisis has exposed some weaknesses in the central bank's position. In spite of its harsh language about the lack of fiscal discipline within the Eurozone, the ECB has surprised many observers with its large purchases of the debt of distressed governments.

4.2 The deficit bias

While later sections will look at two major reasons for large public debt increases – the economic and financial crisis – this section looks at the practical relevance of the deficit bias described in Chapter 2. Keeping in mind that each country is different, the evidence presented in Figure 4.1 shows a relentless rise in the average debt of the Eurozone countries that started several decades ago. Even though a deficit bias is also present in the USA, the figure shows that the best that the Eurozone countries were able to manage (again, individual stories differ) was to stabilise public debt as a ratio to GDP during the first 10 years of the single currency. Even so, this happened at high debt levels, far above the 60% threshold set by the Excessive Deficit Procedure.

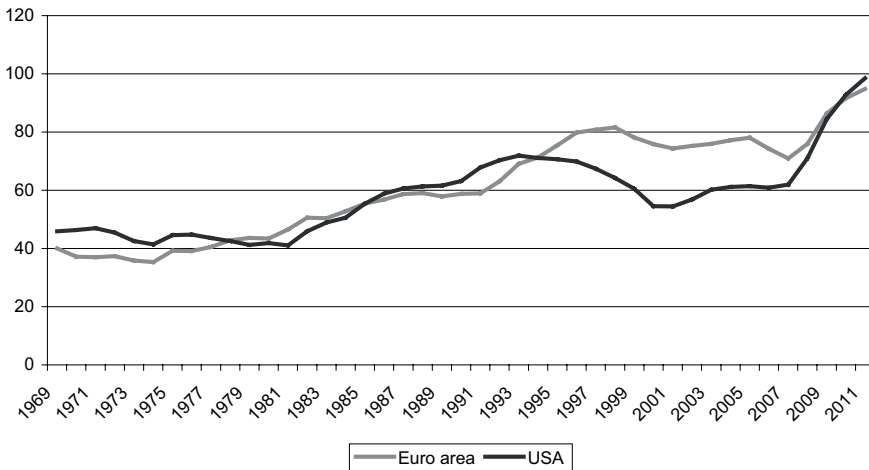
In order to understand the European deficit bias, it is helpful to look at the pre-crisis situation. Among the now 17 Eurozone members, more than half had a debt ratio in excess of 60% in 2006. This was true for only one of the ten remaining EU member countries. Three Eurozone countries, Greece, Italy and Belgium, had debt ratios in excess of 90%.

These debts were not accumulated due to wars or exogenous disasters. Instead, debt financing was regarded as a convenient way of providing ever-increasing public services and transfers. This is precisely what the common pool theory predicts. In Germany, for example, the ratio of spending on transfers and

³⁷ The studies are prepared by the Ageing Populations Working Group (AWG) that is attached to the Economic Policy Committee (EPC). The EPC includes the Heads of Finance Ministries and of the European Commission's Directorate General for Economic and Financial Affairs. The AWG was set up in 1999 and produced its report in 2001, see Economic Policy Committee (2001).

subsidies rose by 9.5 percentage points of GDP between 1970 and 1995, while total revenues increased by only 6.1 percentage points. In the Netherlands, the other EU country for which the OECD provides data back to 1970, the same changes amounted to 7.1 and 5.6 percentage points.

Figure 4.1 Public debt of the US and of the Eurozone (% of GDP)



Notes: Included are the first 14 countries members of the euro area.

Source: *Economic Outlook*, OECD

4.3 The effect of population ageing

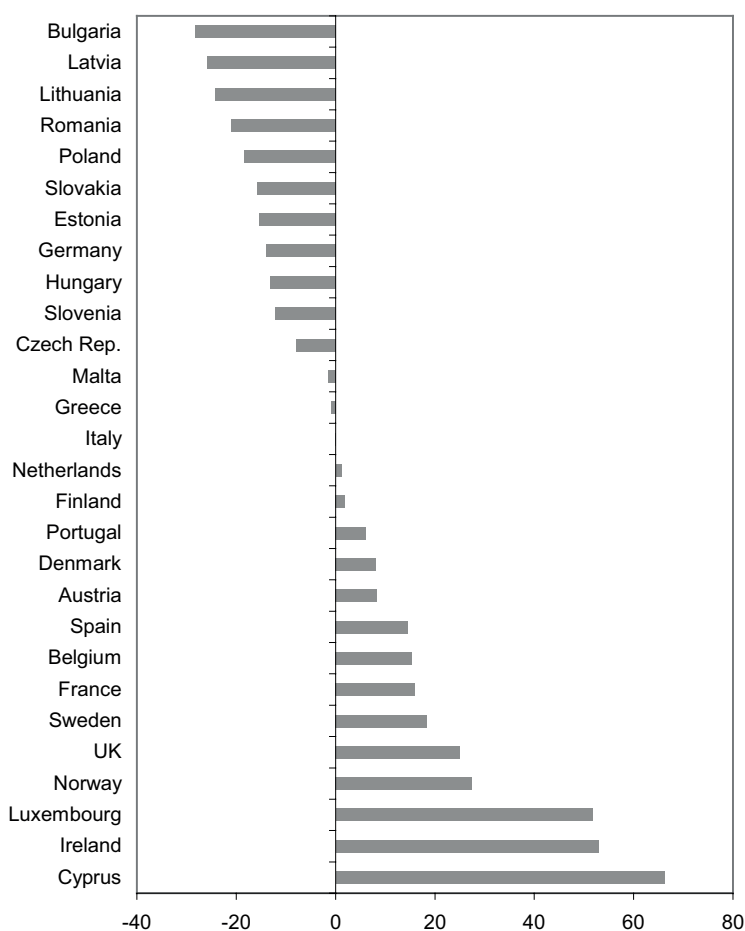
4.3.1 Demographics

The ageing of European population has long been foreseen. In Germany, for example, it started in the 1870s.³⁸ Fertility rates declined significantly in some countries in the late 1960s, and the decline spread to the rest of Europe over the next decades, Ireland being the last country to be affected as late as 2000 (European Commission, 2009). In parallel, the increase in life expectancy at birth has continued to increase, adding about one month every year since 1950. The balance of these effects is unambiguous: After some time, low fertility rates dominate. This is why total population size is expected to decrease in some countries. Immigration is unlikely to stem the tide in these countries, as immigrants tend to adopt the fertility patterns of their host countries quickly and, therefore, even large-scale immigration postpones the population decline for a while at best. As Figure 4.2 illustrates, population decline is expected in 14 of the 27 EU countries between 2008 and 2060. At the same time, the number of

³⁸ Federal Institute for Demographics, http://www.bib-demografie.de/cln_090/nm_750722/DE/DatenundBefunde/Ueberblick/demogr_trends.html

people aged 65 and more will almost double, from 85 million to 151 according to the European Commission (2009) and the share of older people in the EU's population will increase. According to EUROSTAT projections, the share of people age 65 years and above will be 30% in 2060, up from 17.2% in 2009. Figure 4.3. shows that the old-age dependency ratio (the number of those age 65 and up divided by those in working age (15 to 64 years)) will increase from 25.6% in 2009 to 53.5% in 2060.³⁹

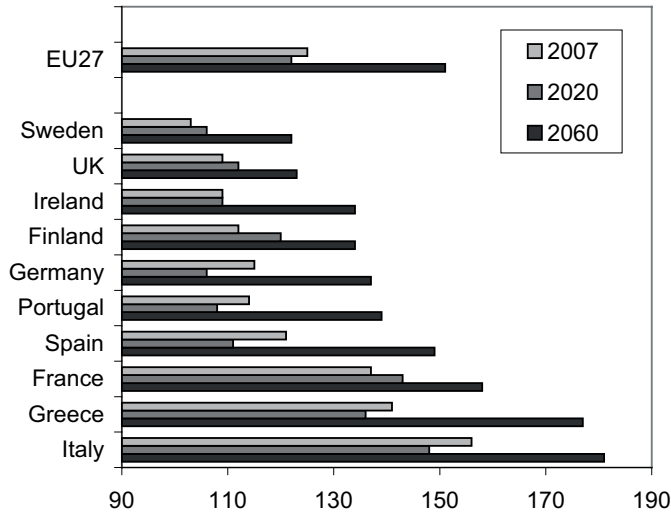
Figure 4.2 Change in total population 2008–2060 (%)



Source: European Commission (2009).

³⁹ epp.eurostat.ec.europa.eu/statistics_explained/index.php/Population_structure_and_ageing#Future_trends_in_population_ageing

Figure 4.3 Dependency ratio (total inactive population as a percentage of employed population aged 15 to 64)



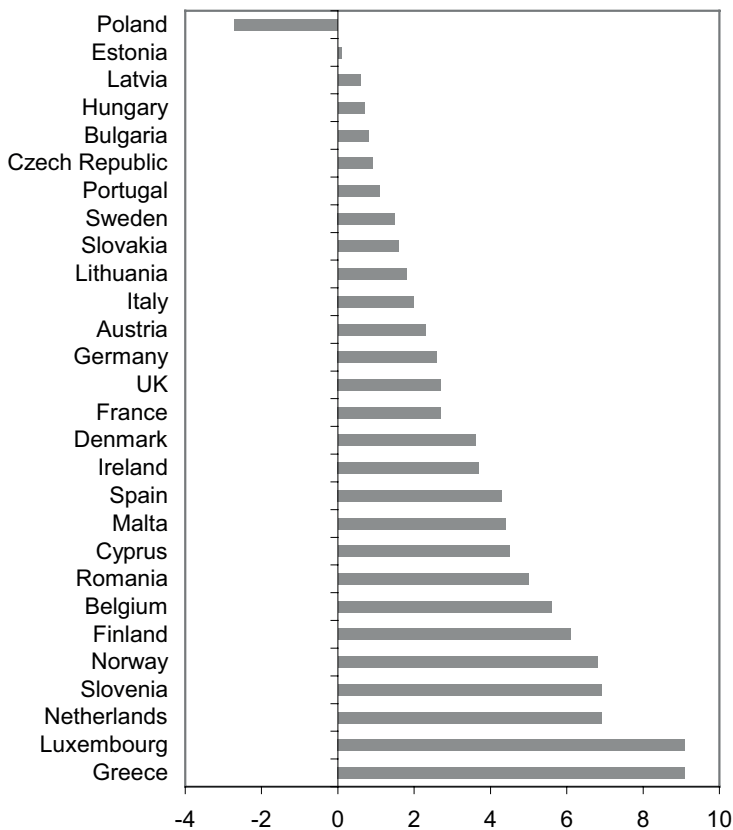
Source: European Commission (2009).

4.3.2 Implications for public finances

The implications for public finances involve both public revenues and spending, but the attention is normally focused exclusively on the spending side, presumably because revenues are the main variable of adjustment once measures have been taken to contain spending.

Predicting the necessarily long-term effects of demographic changes is obviously difficult and involves a large number of assumptions. A starting point is the large-scale study conducted by the European Commission (2009). This study considers five spending items: pensions, healthcare, long-term care, education and unemployment benefits. The last two items are usually little affected by the demographic transition – if anything, the impact is estimated to be favourable – and are not examined here. Overall, for the 25 EU countries covered by the study, ageing-related public expenditures are expected to rise by 2.7% of GDP between 2007 and 2035 and by 4.7% between 2007 and 2060. At the 2035 horizon, pension increases account for 1.6% of GDP, healthcare for 1.0% and long-term care for another 0.6%.

These averages for the EU as a whole conceal massive differences across member countries, as Figure 4.4 makes clear. At one end of the spectrum, annual ageing-related expenditures are expected to decline between 2007 and 2035 by 2.7% of GDP in Poland while, at the other end, they are expected to increase by 9.1% of GDP in Greece. Here again, the crucial item is public pensions. The countries where the estimated impact is smallest generally are those that have implemented major reforms, usually involving a partial privatisation of the pension system.

Figure 4.4 Increase in ageing-related spending between 2007 and 2035 (% of GDP)

Source: European Commission (2009).

A general feature of these estimates is that the main public finance impact of the demographic transition is related to public pensions. This is predicated by the sharply increasing dependency ratio and points to clear policy implications, discussed in the next section. At the same time, it might seem surprising that health-related spending is expected only to increase modestly (as noted above, an addition of 1% of GDP to annual deficits on average in the EU27 countries). This is a controversial conclusion.

For example, a study conducted by the IMF (2009) foresees healthcare spending alone to rise by 3% of GDP by 2030. Cumulated over decades, the difference is large and reflects different assumptions about the role of technology in increasing health care costs. Another controversy, discussed at some length in European Commission (2008), concerns life-time health spending. One view is that longer lifetime comes with longer periods of illness, which would imply a sizeable increase in health spending. Another view is that most people suffer from ailments requiring cost-intensive care only in the last years of life, implying

that a longer lifetime merely postpones health care spending with little effect on total lifetime spending. An intermediate view links spending to age, irrespective of life length, possibly allowing for savings as health at a given age improves as life expectancy rises. This intermediate assumption is used in the *Ageing Report* projections. Sensitivity analysis indicates that more pessimistic assumptions could add up to 1.5% of GDP to spending on health care.

4.4 Radical change during the crisis

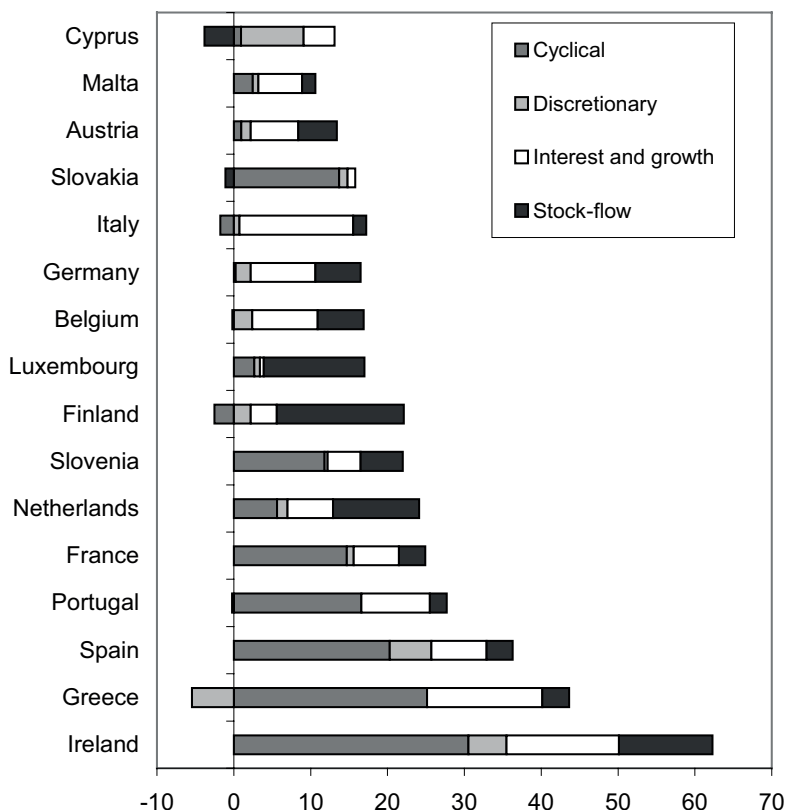
The financial crisis that broke out in 2007 has radically changed the debt situation in Europe. In fact, it has prompted an unprecedented and possibly contagious public debt crisis, which is still unfolding. At the time of this writing, three countries (Greece, Ireland and Portugal) are under adjustment programmes negotiated with the IMF and the European Commission. Italy and Spain may well follow suite. The frontline issue is sovereign default.

As a response, Eurozone member countries have created a temporary emergency facility, the European Financial Stability Fund (EFSF). The Fund allows for financial assistance to the countries in crises outside of the European Treaty framework, in which such assistance was not foreseen.⁴⁰ Meanwhile, the EU governments have agreed to turn this facility into a permanent and expanded European Stability Mechanism (ESM), which will stand ready to give financial assistance to governments that find themselves in difficulty following periods of excessive borrowing. With no respite from market pressure, further steps appear necessary. Whatever the outcome of this crisis, the Eurozone is going to emerge profoundly transformed.

The direct cause of the crisis is the large increase in public debts. From 2007 to 2011, the average public debt ratio in the Eurozone has increased by 10% to 60%, as can be seen in Figure 4.5. The four countries with the largest increases, Spain, Portugal, Ireland and Greece, have experienced severe difficulties refinancing their debts in the financial markets. The disquieting observation is that, according to the Commission's estimates, the proximate main source of debt increase in these countries was cyclical. It is disquieting, because it means that countries like Ireland and Spain, which abruptly went into recession as a result of the bursting of the housing price bubble, could not have prevented a debt build-up easily.

Even more disquieting is the fact that the end is not in sight. Current European Commission forecasts indicate that output gaps will remain negative at least through 2012 in the Eurozone countries, with the exception of Malta and Slovakia. For the area as a whole, the 2012 gap is forecasted to stand at 1.6% of GDP, following a peak of 3.8% in 2009. Unsurprisingly, public debts are generally expected to keep rising relative to GDP at least until 2012, which is the limit of current Commission forecasts. The expected debt to GDP ratios shown in Table 4.1 include some very large debt levels, with an overall ratio close to 90%.

⁴⁰ It is sometimes believed that, in fact, the Treaty's no-bailout clause (Art. 125) forbids such assistance.

Figure 4.5 Debt increases from 2007 to 2011 - (% of GDP)

Notes: "Cyclical" and "discretionary" refer to the two components of the primary current account, cumulated over the period. "Interest and growth" measures debt service net of GDP growth. Stock-flow is an adjustment to account for the debt increase. It includes one-off items such as the costs of bank rescues. Notes: 'Cyclical' and 'discretionary' refer to the two components of the primary current account, cumulated over the period. 'Interest and growth' measures debt service net of GDP growth. Stock-flow is an adjustment to account for the debt increase. It includes one-off items such as the costs of bank rescues. The accounting relationship between b the debt, r and g the real interest rate and real growth rates respectively, and pd the primary deficit, all measured as percentage of GDP (except r) is:

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

Decomposing pd into its cyclical and non-cyclical components, pd_c and pd_{nc} respectively, and into one-off items sf , gives:

$$\Delta b = (r - g)b + pd_c + pd_{nc} + sf$$

which underlies the numbers in Figure 4.5. Note that the decomposition of the deficit is a source of error, which is amalgamated into the residual term sf .

Source: European Commission (2010a), AMECO on-line and authors' calculation.

Table 4.1 Gross public debts in 2012

Eurozone 88.5	Belgium 97.5	Germany 81.1	Ireland 117.9	Greece 166.1	Spain 71.0
France 86.8	Italy 119.8	Cyprus 64.3	Luxembourg 19.0	Malta 67.9	Netherlands 64.0
Austria 75.4	Portugal 107.4	Slovenia 46.0	Slovakia 46.8	Finland 52.2	Estonia 6.9

Source: AMECO, European Commission.

4.5 The debt challenge

These numbers do not, however, include yet the impact of the demographic transition examined in Section 4.3. We provide a very rough estimate at the horizon of 2035 of the overall challenge by combining the two events. To do so we must make strong assumptions, which do not have to be plausible or realistic. These assumptions are the following:

- In countries where the debt has not been stabilised by 2012, stabilisation will be achieved by 2015 through a linear extrapolation.⁴¹ Thereafter, the debt is assumed to remain constant.
- The costs of the demographic transition are not covered by tax increases nor reduced spending.
- The resulting debt increases kick in linearly starting in 2012 to reach the amounts indicated in Figure 4.4 by 2035.
- The increases are cumulated at a growth-adjusted interest rate of 1%, with a second scenario of 3%.

The results of these simulations, presented in Table 4.2, are probably optimistic regarding both the stabilisation of the debt after the crisis and the slow and gradual phasing-in of age-related expenditures. They are not forecasts either, mainly because they rule out adjustments to age-related expenditures, which could reduce the debt build-up. The only purpose of this exercise is to provide an order of magnitude of the debt challenge.

The challenge is steep. For the Eurozone as a whole, gross debts will more than double. With two notable exceptions (Estonia and Slovenia), indebtedness will exceed 100% of GDP in 2035 under both scenarios. The countries at the bottom of the table face debt levels that would be unlikely to be financeable under current conditions. Even those countries whose gross debts are currently small (Luxembourg, Slovenia and Finland, for example) face burdens that may not be viable.

⁴¹ More precisely, the increase between 2011 and 2012 is reduced by one-third each of the following three years.

Table 4.2 Gross public debts in 2035 (percentage of GDP)

	2007	2035 Adjusted rate = 1%	2035 Adjusted rate = 3%
European Union	59	121	128
Eurozone	66	132	140
Estonia	4	15	15
Slovakia	30	71	75
Austria	59	106	111
Germany	65	110	116
Portugal	63	111	113
France	64	129	136
Malta	62	130	141
Cyprus	58	132	143
Spain	36	134	145
Finland	35	137	152
Slovenia	23	144	160
Luxembourg	7	145	167
Italy	104	147	152
Netherlands	45	161	178
Ireland	25	172	180
Belgium	84	179	193
Greece	105	285	307

Source: European Commission (AMECO online) and authors' calculations.

4.6 Facing up to the challenge

The combination of the ageing process and of the financial crisis represents a major challenge for policymakers in most European countries. There is clear awareness that difficult decisions lie ahead, in fact a number of countries have already implemented major measures. Others, however, have made little progress. The European sovereign debt crisis is a clear reminder that inaction is not a viable option.

This section looks at the strategic options to conclude that, in most Eurozone countries, along pension reforms, spending cuts will have to bear most of the burden of debt rollbacks, with little relief from growth and limited room for tax increases.

The emphasis then shifts to the budgetary process and its political underpinnings in light of the principles developed in Chapter 2.

4.6.1 Growth will not do it

Over the past 20 years, some countries (Finland, Ireland, Spain, Sweden) have succeeded in reducing their debt/GDP ratios very significantly. In most cases, the

key success factor was rapid growth.⁴² The debt consolidation success stories of yesteryear mainly occurred in countries that were catching up to the technology frontier, either because of reforms following low initial per capita GDPs (Ireland is a prime example) or because other reforms jumpstarted innovations in relatively small countries where industry-level successes had large macroeconomic effects (Finland, Sweden). The question is whether sufficiently fast growth is a possible strategy. Rapid growth can help stabilise public debts as a proportion of GDP through two main channels:

1. Mechanically, the faster GDP increases, the more the ratio of debt to GDP tends to decline, everything else being equal.
2. Faster GDP growth raises tax revenues without forcing the government to raise tax rates, and it allows the government to reduce the ratio of spending to GDP without having to cut the level of spending. Thus, reducing the debt ratio becomes less politically painful if it is based on sufficient economic growth.

The question then is whether and to what extent European countries can reasonably hope for growth to help reduce their public debts. Rapid and sustainable growth is possible, where the economy is far enough from the technology frontier. Table 4.3 takes an informal look at this issue for the OECD countries. We study the debt reduction episodes, most of which took place in the 1990s. The second row in the table shows the reduction in the debt/GDP ratio since the peak was achieved (the peak ratio is shown in the first row and the corresponding year is indicated in the third row) and 2006, the pre-crisis year. Shaded areas in the second row identify large debt reductions, those that led to a 20 percentage points reduction of the debt-GDP ratio. These successful rollbacks can be explained by a rapid growth potential because the country is still far from the technology frontier or by adequate reforms concerning the budget process. The distance from the technology frontier is approximated by the ratio of PPP-adjusted GDP per capita of a country to that of the USA. Shaded areas in the fourth row correspond to ratios of 60% or less, that is, they identify countries likely to have a significant catch-up potential. The last row indicates whether a budgetary reform has been implemented and, if so, when. It also notes the existence of an IMF programme at the time when the debt peaked.

The table confirms that, by and large, debts were not reduced in countries that (1) were close to the technology frontier and (2) did not reform their budgetary processes. Some countries that were close to the technology frontier still achieved a large public debt reduction; these adopted reforms of their fiscal institutions (Belgium, Canada, Denmark, Sweden). In some instances (Australia, Netherlands, New Zealand, Spain), the institutional reforms followed debt stabilisation, thus enshrining the measures that had been taken earlier and had been successful enough to gain general acceptance. This suggests that the potential for high growth alone is not a sufficient condition to cut public debts. Institutional reforms are necessary to eliminate the deficit bias.

⁴² See Von Hagen (2006a).

Table 4.3 Debt reductions

	Australia	Austria	Belgium	Canada	Cyprus	Denmark	Finland	France
Highest debt (% of GDP)	31.4	68.4	134.1	101.7	70.2	72.4	57.7	66.4
Reduction	21.6	6.3	46.8	31.5	5.6	31.4	18.0	2.8
Year when debt peaked	1994	1996	1993	1996	2004	1998	1994	2005
GDP/capita	88	87	82	84	51	87	68	73
Growth	2.5	2.2	2.0	2.6	1.8	1.6	3.5	1.6
Reform	1998	no	mid 90s	mid 90s		1998	1991	no
	Germany	Greece	Ireland	Italy	Japan	Mexico	Netherlands	New Zealand
Highest debt (% of GDP)	68.0	103.7	94.5	121.8	191.6	78.1	96.5	76.0
Reduction	0.4	6.6	69.6	15.3	0.3	39.8	49.1	56.1
Year when debt peaked	2005	2001	1991	1994	2005	1986	1993	1987
GDP/capita	77	59	61	76	75	37	89	70
Growth	3.3	3.8	6.3	1.4	2.0	4.7	2.2	1.5
Reform	no	no	early 80s	2002	no	IMF	1994	1994
	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	UK	USA
Highest debt (% of GDP)	61.3	64.7	67.4	84.4	55.3	77.6	49.3	66.5
Reduction	0.9	0.8	27.9	39.3	8.2	31.5	6.1	5.4
Year when debt peaked	1993	2005	1996	1996	1998	2001	1997	1995
GDP/capita	119	50	63	79	96	22	78	100
Growth	2.6	1.1	2.7	3.1	1.3	5.5	0.9	2.2
Reform	2001	no	2003	1996	2001	IMF	no	no

Notes: Debt reduction is measured as the change in the debt/GDP ratio between the year when maximum was reached and 2006; GDP per capita: relative to the US (in %) in the debt peak year; growth is measured over the 10 years since debt peaked or a smaller number of years until 2006.

Source: Public debts: Historical debt database, IMF; GDP per capita: The Conference Board Total Economy Database, January 2011, <http://www.conference-board.org/data/economydatabase/>. Years of reform to the budget process are from *Economic Outlook* 72, OECD (2007, pp 732–4) completed by the authors.

The implication is that Greece and Portugal, which still have some catch-up potential, may hope to outgrow their public debts. Elsewhere this is unlikely to be the case.

4.6.2 Spending cuts or tax increases?

According to Alesina and Perotti (1996), lasting debt stabilisations rely primarily on spending cuts, not tax increases. The argument is that tax increases open up room for more spending when cyclical conditions have improved. In Europe's case, it is often noted that given heavy tax burdens, further tax increases are likely to worsen also large tax deadweight losses.

Looking at the Eurozone experience offers an interesting outlook on this issue. Between 1999, the first year of existence of the euro, and 2006, the last year before the onset of the crisis, the overall primary budget balance – measured as percent of GDP – of the Eurozone (defined as the 12 countries that started in 1999 or 2001) worsened by 1.1 percentage points, the result of tax cuts representing 1.3 percentage points and of spending cuts amounting to 0.2 percentage points.

More information is presented in Table 4.4, which compares budgetary outcomes in the Eurozone and in the rest of the OECD. It shows that, in spite of the Stability and Growth Pact, fiscal performance was worse in the Eurozone than outside in the sense that fewer Eurozone countries managed to improve their primary budget balances. Both among those that did and the others, the proportion of countries achieving primary revenue increases was the same as in the rest of the OECD. In contrast, the proportion of countries achieving spending cuts was larger in the rest of the OECD. No Eurozone country achieved both spending cuts and revenue increases at the same time.

Table 4.4 Evolution between 1999 and 2006 (percentage of countries in each group)

	Eurozone	OECD excluding Eurozone
Improvement of primary budget	29%	59%
Spending cuts	33%	41%
Revenue increases	25%	23%
Both	0%	14%
Among countries where primary budget improved:		
Spending cuts	67%	46%
Revenue increases	33%	31%
Both	0%	23%

Notes: Eurozone includes the 11 original member countries and Greece, which joined in 2001. The OECD countries excluding the Eurozone includes Bulgaria, the Czech Republic, Denmark, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia, Slovakia, Sweden, the United Kingdom, Iceland, Norway, Switzerland, the United States, Japan, Canada and Australia.

Source: European Commission (AMECO online).

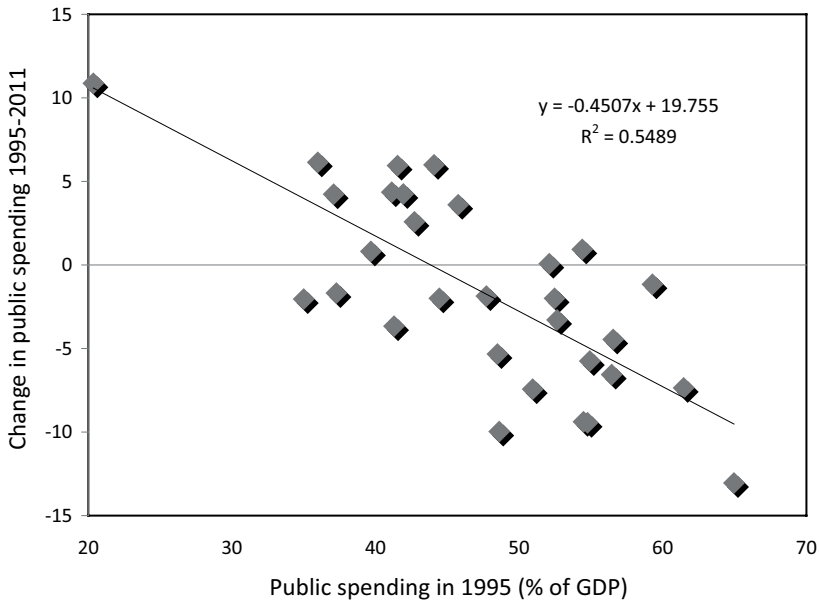
Looking at the Eurozone, a large majority of the countries improving their primary balances also achieved spending cuts. This supports the results of Alesina and Perotti. Similarly, in the rest of the OECD, improvements in primary balances were achieved mostly in countries that cut spending either combined with revenue increases or not.

These observations strengthen the argument that, in the Eurozone, spending cuts are likely to be more helpful in meeting the debt challenge. This conclusion is reinforced by the population ageing problem, which, as argued above, is expected to add significantly to public spending over the next decades.

The empirical observation that fiscal consolidations are generally more successful if they are based on spending cuts begs the question why that is so. Perotti *et al* (1998) extend Alesina and Perotti's analysis and show that problems with large deficits and debts in OECD countries typically result from a lack of control over some parts of government spending. In such situations, spending cuts force the government to 'attack the problem at the source' (Perotti *et al*, 1998, p 16). Just finding additional revenues will cover the deficit problem for a while, but, without rectifying the underlying spending problem, new deficits will emerge. This brings us back to the role of fiscal institutions. In Chapter 2, we have argued that countries with good budgetary institutions will find it easier to contain public sector deficits and debt. By setting multiannual spending targets in a contract framework or by delegating the power to set such targets to the finance minister, governments will find it easier to develop and implement a spending-based strategy of fiscal consolidation. Thus, governments with good budgetary institutions are more likely to achieve successful consolidations. This conjecture is consistent with the empirical evidence presented in Von Hagen *et al* (2001) for the EU countries in the 1980s and 1990s.

In addition, the choice between revenue and spending based consolidations involves a difficult judgment regarding the benefit of public services and transfers against the deadweight loss of taxation. The empirical analysis in Afonso *et al* (2003), for example, suggests that the efficiency of public sector expenditures is typically much lower for large governments (relative to GDP) than for small governments, but these estimates are fairly rough. The issue can be addressed indirectly by looking at revealed preferences, assuming that past actions reflect what governments and their voters wish.⁴³ The evidence presented in Figure 4.6 for the OECD countries is that public spending, as a share in GDP, has tended to decline between 1995 and 2011 where it was initially larger and to rise at the opposite end of the spectrum. The mean towards which these countries have tended to regress is about 45%. In 2011, only three countries exhibit a spending ratio lower than 45% – Estonia (38%), Luxembourg (39%) and Spain (42%). (The only non-European country above this threshold is New Zealand.) All other countries are likely to wish to reduce the size of government. They need institutional frameworks for their budgetary policies that enable them to do so.

43 In the more realistic view of the world presented in Chapter 2, governments are captured by interest groups.

Figure 4.6 Public spending in the OECD: regressing to the mean

Note: The vertical axis displays the change in the spending/GDP ratio.

Source: *Economic Outlook*, OCED

4.6.3 Contributions from Monetary Policy

A unique feature of Europe is the fact that 17 independent countries share a common currency. This characteristic has long been a source of puzzlement, concern or even deep scepticism. The countries that created the euro in 1999 were willing to give up formally monetary policy independence but not sovereignty in fiscal policy matters. The seminal Delors Report recognised that a monetary union requires that every member country respect strict fiscal discipline. How to match this requirement with fiscal sovereignty has been identified as one of the key challenges of the Eurozone from its inception. It has led to the adoption of the Excessive Deficit Procedure, which imposes an annual deficit threshold (3% of GDP) and a debt threshold of 60% of GDP and allows for fines to be levied on recalcitrant countries. In addition, the Stability and Growth Pact (SGP) has committed Eurozone member states to even stronger discipline calling for budgets to be close to balance or in surplus. To implement these commitments and monitor compliance, a complex system of fiscal plans and reports has been set up.

The sovereign debt crisis has confirmed the long-held view that the Stability and Growth Pact is unlikely to be effective (Eichengreen and Wyplosz, 1997). It has also confirmed the Delors Report's insistence that fiscal indiscipline in some countries represents a lethal danger for the union as a whole. At the time of this writing, the Eurozone is struggling with the crisis.

A striking feature of this sovereign debt crisis is that, so far at least, it has been circumscribed to the Eurozone. One possible interpretation is that Eurozone member countries cannot devalue away the contractionary effects of large deficit corrections. Among the other possible interpretations, is the role played by the ECB and, more generally, the efforts by European national authorities to bail out countries in difficulty (Wyplosz, 2011a).

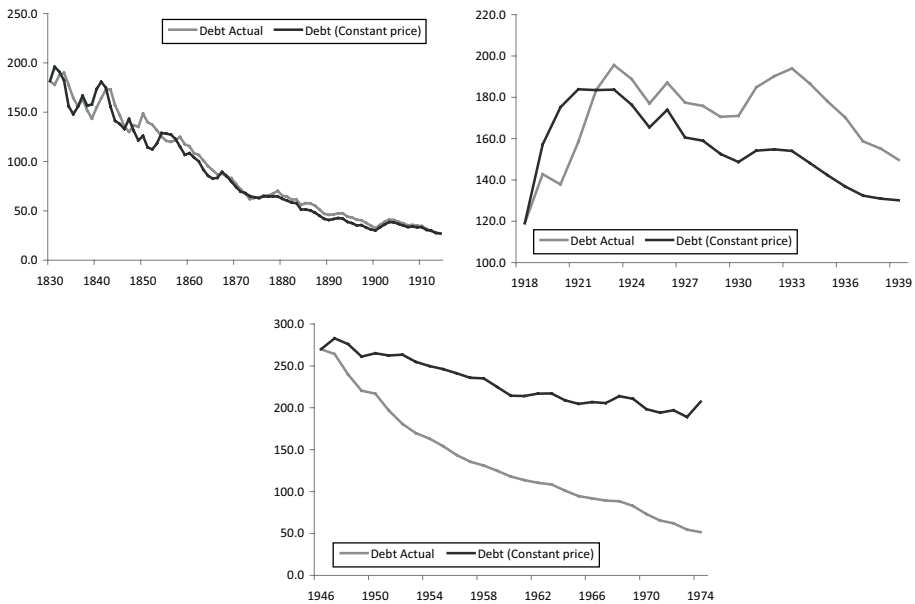
An important question is whether the ECB's emergency purchases of distressed sovereign debts is a signal that price stability might be traded off against other pressing objectives, such as alleviating the debt burden of its member countries. In designing its position on this issue, the ECB will undoubtedly keep in mind that its mandate unambiguously identifies price stability as its first and foremost objective. Yet, the ECB's numerous interventions designed to stabilise sovereign debt markets are widely seen as stretching its mandate. Hence the question: will inflation play a role in reducing the public debt burden? The conventional wisdom is that the ECB will not willingly use the inflation tax, and we agree even though the logic behind this policy is not compelling, as discussed in Box 4.1.

Box 4.1 Inflationary financing of large debts

In addition to providential rapid growth, there are three, and only three, ways of bringing down public debts. The first one is to run primary surpluses for sufficiently long. The second one is to default on all or part of the debt. The last one is to let inflation reduce the real debt value, assuming that the debt is not indexed and of sufficiently long maturity. In the end, the question is who will pay: taxpayers in the first case, creditors in the second case, citizens that are not well protected against inflation in the third case.

What does history tell us about this choice? Data available for the UK since the early 19th century is interesting. The first chart in Figure 4.7 shows that it took about a century to bring the debt inherited from Napoleonic wars from about 180% of GDP to 27% on the eve of World War I. The chart shows the actual debt ratio and the ratio that would have been observed had the price level been constant, which is what happened in fact. The second chart does the same for the interwar period. The debt rose to nearly 200% at the time of the Great Depression and never declined much until World War II. Had the price level been constant it would have declined substantially more, but deflation made things worse. The third chart shows that, after World War II, it took about 40 years to reduce the debt from 270% of GDP to about 50%, much faster than in the 19th century. The chart also shows that the debt reduction would have been much smaller had the price level remained constant. Indeed, from 1946 to 1974 the price level increased fourfold. Inflation played a major role.⁴⁴ These historical examples show that it takes considerable time to reduce large debts, and that inflation can accelerate the process.

⁴⁴ The inflation correction is very rudimentary as it ignores the effect on the interest rate. For a better procedure – which requires information not available – see Buiter (1985), which provides a better interpretation of the post-World War II episode (and reaches the same conclusion).

Figure 4.7 British public debt (% of GDP)

Note: Actual debt is the ratio of nominal debt to GDP (D/PY). Debt at constant price is calculated by multiplying the previous ratio with the price index.

Source: Debt: Abbas et al (2010); Price: O'Donoghue and Goulding (2004)

The ECB will have to credibly clarify its position. Its continuous criticism of fiscal indiscipline among member states and its frequent requests for a rigorous enforcement of the Stability and Growth Pact merely indicate that it understands the difficulties of remaining true to its mandate. Its stern opposition to debt restructuring during the first phase of the crisis reflects its fears about the stability of the banking system and has revealed the vulnerability of a monetary policy relying on loans to the banking system collateralised with government debt as its primary instrument. Over the course of the crisis, the ECB has lowered dramatically the quality of collaterals used in lending operations and embarked on a large-scale bond purchasing programme to support the prices of Greek, Portuguese and Irish debt in order to avoid tensions in its operating system for monetary policy. As a result, it is no longer entirely sure that (moderate) inflation will not be part of the story.

4.7 Conclusion

European debts were large before the economic and financial crisis, they grew quite sizeably during the crisis and the demographic transition is likely to add another thick layer unless important changes to the pension and health systems are made. The seriousness of the situation has been brought home by

the sovereign debt crisis, which has further shown the risk of contagion within the Eurozone.

The diagnosis is beyond controversy and the prognosis is hardly in doubt either. At the time of writing, the crisis has migrated from periphery to core countries. Whatever the outcome, including plausible sovereign defaults, the next thirty years cannot be a replay of the previous thirty years. With little hope that fast economic growth will painlessly wash the problem away, the hitherto trend increase of debt-to-GDP ratios will have be reversed. This requires the adoption of effective budgetary arrangements, an issue that is examined in detail in Chapter 6.

5 Japan's Fiscal Woes

By the numbers, Japan has the worst fiscal situation of any major country. This chapter analyses the state of the fiscal problem, the economics and politics of why things worsened, various alternatives for restoring fiscal soundness, and prospects for reform, including a reform triggered by market forces. We conclude that solving Japan's fiscal problem requires a coordinated package to raise productivity growth, end deflation, and reorient spending toward productivity growth such as R&D spending, along with tax reform to promote more efficient resource allocation. Political governance reforms are also called for, including reforms of the electoral system, of the regional structure of government, and of budget procedures. The latter would include increased transparency through a return to the budget-screening process and hard budget constraints for both healthcare and pension systems, enforced by supermajority approval for increases of funding.

5.2 The true state of Japanese finances

The budget debate in Japan is hobbled by many factors, but among the most important is lack of accurate, timely data on the true state of finances. The debate centres on the initial budget plan by the central government, referring to the 'general account' of the central government only (hereafter CGGA). For fiscal year 2008, the last initial budget prior to the global financial crisis, the CGGA showed a total size of ¥83.1 trillion (see Table 5.1). On the spending side, social insurance costs were listed as ¥21.8 trillion, and debt service at ¥20.2 trillion. On the revenue side, taxes were listed at ¥53.6 trillion, and the financing requirement (bond issuance) at ¥25.3 trillion.

While these figures are impeccably correct for what they show, the CGGA, they are highly misleading as a guide to the true state of the Japanese public sector budget. In fact, total spending in FY2008, properly measured, was ¥196.7 trillion, not ¥83.1. Total social benefit spending was ¥104.0 trillion, not ¥21.8 trillion.

Table 5.1 General account of the central government, initial budget, FY2008

Expenditure		Revenue	
Debt Service	20.2	Tax Revenue	53.6
Spending on basic fiscal items	62.9	Other Revenue	4.2
Social insurance costs	21.8	Bond Issuance Proceeds	25.3
Tax transfers to local government	15.6	Article 4 Bonds (Construction Bonds)	5.2
Other	25.5	Special Issuance Bonds (Deficit Bonds)	20.1
Total	83.1	Total	83.1

Note: This budget was first presented in December 2007.

Source: Ministry of Finance, http://www.mof.go.jp/budget/budger_workflow/budget/fy2008/seifuan20/yosan002.pdf

These immense discrepancies stem from several sources:

- (a) *Definition of government.* The CGGA refers only to a subset of spending by the central government. It omits local governments and social insurance funds. To judge government finances on the basis of the CGGA is equivalent to judging a company on the basis of partial accounts for the parent company of a complex conglomerate.
- (b) *Accounting standards.* The presentation of the CGGA is a mixture of operating, transfer, financing and capital transactions. For example, the social insurance costs of ¥21.8 trillion are, in fact, only the subsidies paid to the social security fund by the central government from general tax revenue.
- (c) *Off-budget items.* The CGGA does not include the many ‘special accounts’ of the central government, much less similar accounts at local governments. This has become a serious distortion recently, because increased transfers from the special accounts to the CGGA are included in ‘other revenue’, even if these accounts float bonds to secure the funding for the transfers.⁴⁵
- (d) *Supplementary budgets.* Japan adopts a ‘supplementary budget’ virtually every year, in the autumn. The purpose of such supplementary budgets is to bring unexpected spending needs or unexpected revenue needs into the budget; this is not an unreasonable approach. However, basing the budget debate on comparison of initial budget in year t to initial budget in year $t - 1$ necessarily distorts the debate about economic impact.

So, what does the budget really look like? A comprehensive look for FY2008 situation is given in Tables 5.2 and 5.3. These figures are from the national accounts, and refer to the ‘general government’, that is, the consolidated figures for central government, local government and social insurance. The large

⁴⁵ For example, in the FY2011 budget, ‘other revenue’ was ¥10.6 trillion, reflecting ¥5.1 trillion of such special dividends (sometimes known as ‘maizo-kin’ or ‘hidden treasures’).

transfers among the different levels of government are excluded from the net figures in this presentation.⁴⁶

Table 5.2 Accounts of general government, consolidated, FY2008

Expenditures	196.7	Total receipts	196.7
Public capital Formation	15.0	Net taxes on production and imports	38.9
Final consumption expenditure	93.4	Taxes on production and imports	41.8
Social benefits in kind (eg medical)	34.3	less: Subsidies	2.9
Provision of non-mkt goods/services	18.5		
Actual final consumption	40.6	Property income ex interest receipts	0.7
Social benefits in cash	61.4	Current taxes on income and wealth	43.4
Other current transfers, net	8.4	Social contributions	57.5
Other current transfers, gross	56.2	Other current transfer receipts, net	1.6
Intragovernment	47.8	Gross current transfer receipts	49.4
Rent paid	0.3	Intragovernment	47.8
Interest payments	12.7	Interest receipts	7.7
Capital transfers, net	3.6	Capital transfers, net	14.5
Capital transfers, gross	10.9	Gross capital transfer receipts	21.8
Intragovernment	7.3	less: intragovernment amount	7.3
		(Total non-financing receipts)	(164.2)
Land purchases	2.0	Financing receipts	32.5

Source: Japan Cabinet Office, National Accounts Yearbook, 2010, p 261.

Some of the contrasts between the consolidated figures and the CGGA figures are astonishing. For example, spending on social benefits (including social benefits in kind, in cash, and net other transfers) is ¥104.0 trillion – not the ¥21.8 seen in CGGA. Tax revenue (including taxes on production, imports, income, wealth, and social contributions) is ¥139.8 trillion, not ¥53.6 trillion.

A different and more illuminating way to look at the fiscal accounts is to break them into four functional categories, public good provision (eg defence, foreign policy, education), social benefits (pensions, medical, etc), interest payments, and capital transactions. The results are interesting: the public goods activities of the government – that is, the public goods and services that the government provides to citizens, funded by general tax revenues – run a surplus, which amounts to more than ¥10 trillion. Capital transactions also run a surplus, of similar magnitude.

The balance on interest payments is negative, at about ¥5 trillion, or about 1% of GDP. The largest deficit comes in the social benefit balance, at more than ¥46.5 trillion, or 9% of GDP. Taken together, these three items add to the ‘recurring balance’, the net amount that needs to be financed, of ¥41.3 trillion.

46 For example, in FY2008, gross cash transfers at all levels of general government were ¥56.2 trillion, but fully ¥47.8 trillion went to other levels of government. This figure is included as a reference line on both expenditure and receipt sides of the presentation. It is presented the same way in the national accounts.

This financing was provided by repayments of earlier lending by the government (ie net capital transactions, an inflow of ¥8.9 trillion) and by borrowing (mostly bond issuance) of ¥32.5 trillion – the latter of which is equal to the overall balance.

Thus, it is fair to conclude that Japan runs a tight fiscal ship, except in the area of social benefits. In this area, unfortunately, expenditures far exceed receipts. Of course, it is not necessarily wrong for the social benefit function to run a deficit. However, social decisions need to be made on how big a deficit to run. As things stand now, virtually every other part of government – defence, education, science, economic development, etc – is being starved in order to pay for social benefits that are underfunded.

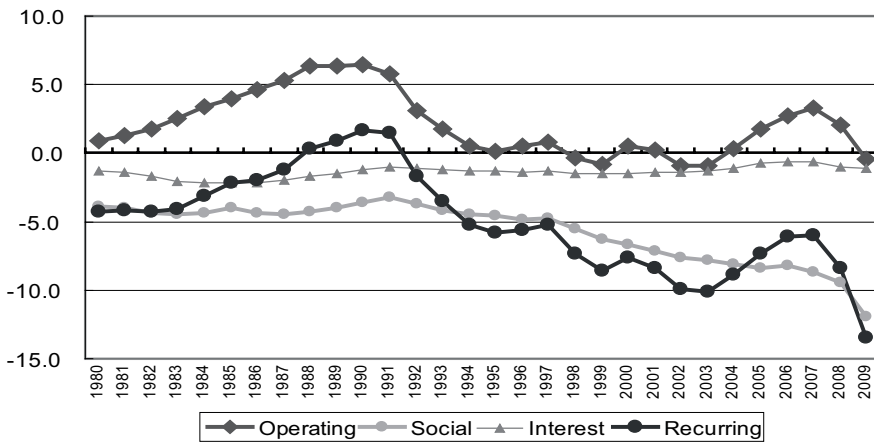
Table 5.3 Business line breakdown of government transactions, FY2008

Operating balance	10.1
Operating income	84.5
Operating expenditure	74.5
Social benefit balance	-46.5
Social system receipts	57.5
Social system payments	104
Interest balance	-4.9
Receipts	7.7
Expenditure	12.7
Capital transactions balance	8.9
Capital transfer receipts	14.5
Capital transfer expenditure	3.6
Land purchase	2
Overall balance	-32.5
Non-financing receipts	164.2
Expenditure	196.7

Source: Cabinet Office, *Annual Report on National Accounts*, 2010, p 261, and Morgan Stanley calculations.

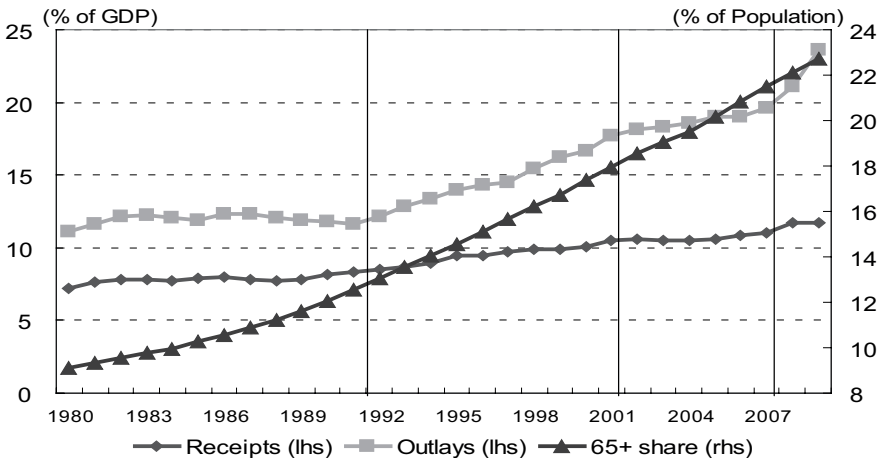
The history of Japanese fiscal accounts, using this functional breakdown, is shown in Figure 5.1. The key point is the social balance, which hovered at a deficit of somewhat less than 5% of GDP until 1997. It flattened a bit in the 2003–2007 period, but then resumed its expansion. This pattern occurred because of benefit increases, which have easily outrun contribution increases for the last 20 years (Figure 5.2). Ageing of the population has contributed to this pattern, but much more is at work. After all, ageing proceeded apace in the 1980–92 period, with no increase in the social deficit. This observation suggests that control over social spending must play a key role in any fiscal consolidation programme. Such control could come either in the numerator (ie holding down costs) of the ratio or in the denominator (raising GDP) – an issue addressed below. Either way, there is clearly a need for a hard budget constraint in social spending.

Figure 5.1 General government balances, by “business line”: Public goods, social, interest, and recurring



Source: Cabinet Office, ESRI, National Accounts.

Figure 5.2 Social spending and revenues, vs. ageing



Source: Cabinet Office, ESRI, National Accounts, and Morgan Stanley calculations.

Another problem is data lags. There is a minimum lag of 10 months before the national accounts figures for a given year are available.⁴⁷ Hence, a true picture of the fiscal situation is available only more than two years after the fact, and at the tail end of the budget process for the subsequent fiscal year. Such long lags force

⁴⁷ The consolidated figures for the general government appear in the SNA accounts. The figures for FY2009 were released at end-January 2011 – well after they could have any impact on the budget process for FY2011. In short, the figures for 2008 were the latest available when the budget for 2011 was compiled – a lag of three years!

the debate into reliance on partial figures such as those of the Ministry of Finance (MoF) initial budget.

This state of affairs raises an interesting riddle. On one hand, it has been known for years that Japan will never solve the fiscal problem until there are accurate,⁴⁸ timely data on fiscal spending and revenue. Yet, very few steps have been taken to correct the situation.⁴⁹ If the problem is so glaringly obvious, why has so little been done? The answer to this question is essentially a matter of political economy and of budget procedures – precisely along the lines discussed in the chapter on political economy. The major problems are the common pool problem and the budget procedure problem.

5.3 Political economy of fiscal policy in Japan: The common pool is very deep

Chapter 2 explains that a common pool problem arises when the marginal benefits from public spending are not aligned with the marginal costs of associated funding. Interest groups that have stronger control over the outflows from the common pool (through spending policy) and to the coercive measures creating inflows into the common pool (ie the tax system) act perfectly rationally when they vote taxes for others and benefits for themselves. In Japan this process is built into the electoral system in a way that has resulted in today's fiscal problem. This is essentially a question of who benefits, who pays, and why.

A rough estimate of the age breakdown of transfer benefits from public spending is easy (Table 5.4). The issue comes down to a question of entitlements, which in turn comes down to pension and medical payments. The largest share of these payments naturally goes to the elderly. All pensions are assumed to accrue to the elderly. Of medical costs, the share from the Old Age Medical Care system is attributed 100% to the elderly. The other categories show different assumptions, based on the nature of the system. (For example, we attribute 0% of medical costs for the employee medical system to the elderly.⁵⁰) For nursing care, we assume 100% of benefits go to the elderly. One could adjust the percentages assumed in the table somewhat; however, the overall result would not change: the elderly

48 See, for example, Tanaka Hideaki, 'Makuro Zaisei Unei to Koukaikei Joho – Koukaikei no Yakuwari to Genkai', PRI Discussion paper series, No. 05A-06, Japan Ministry of Finance, April 2005; Ministry of Finance, Fiscal System Council (Zaisei Seido Shingikai, 'Kokaikei ni Kan suru Kihonteki Kangaekata' [Basic Approach to Public Accounting]), 30 June 2003.

49 Which is not to say that nothing has been done. Over the last few years, the Ministry of Finance has worked with the Ministry of General Affairs (which oversees local government finances) to create a credible set of indicators to gauge the health of the 1,800 local governments around the country. MoF did this in its capacity as lender and guarantor of the borrowing by local governments, a role known as 'lender responsibility'. This change was triggered in part by the non-performing loan problem in the private sector. When private banks were required to classify loans to companies on the basis of criteria measuring strength of the borrowers, it seemed only rational for MoF to do the same. Hence, a set of similar criteria have been developed and implemented.

50 This system applies to employees of larger firms. When a claim is made, the employees pays 30% of the cost (20% for dependants of the employee), and 70% is paid by the insurance system. The figure in the table above covers the amounts paid by the system for these people. For example, when the author recently purchased 2 months of blood pressure medication at a pharmacy, the overall cost was ¥10,890. The author himself paid ¥3,270, and the system covered the remaining ¥7,620. The latter sum of ¥7,620 will show up in the 'Employee Health Insurance Associations' line item.

account for ¥78 trillion of the total ¥95 trillion of social transfers. In short, the elderly benefit.

Table 5.4 Rough estimate of government transfers for seniors, FY2008

	Amount (¥ trillion)	% for seniors	Amount for seniors (¥ trillion)
Total	95.2		78.2
Medical	28.1		17.9
Medical (regular)	11.7	50%	5.9
Medical (old age)	10.5	100%	10.5
Employee health insurance associations	3.6	0%	0.0
National health insurance association	2.3	67%	1.5
Pension	50.3		50.3
Private sector employees	43.0	100%	43.0
Public sector employees	7.3	100%	7.3
Nursing care	6.6	100%	6.6
Unemployment/accident insurance	2.3	0%	0.0
Other	8.0		3.4
Child allowances	1.0	0%	0.0
Unfunded assistance	6.8	50%	3.4
Other	0.2	0%	0.0

Source: Japan Cabinet Office, *Annual Report on National Accounts*, 2010, p. 271.

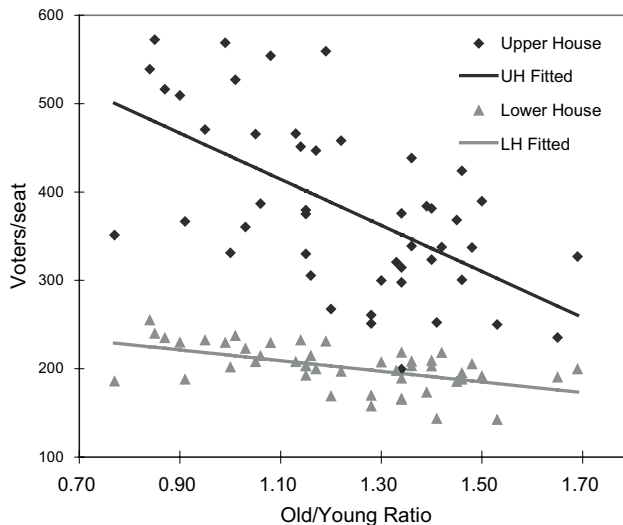
Who pays? This is a complex question that must trace incidence of various taxes by age categories, probably an impossible task. However, it is quite reasonable to conclude that the elderly do *not* pay 49% of the total revenue burden – the percentage implied by taking their estimated transfer benefits (¥78.2 trillion) as a share of total government revenue (¥164.2 trillion). After all, taxes on production, imports and income fall on the working generation, for the most part, as do social contributions. In short, the young pay.

These data confirm that the common pool problem is very substantial in Japan. The origin of this problem lies in the structure of the electoral system, which de facto heavily overweights the votes of the elderly. This distortion arises due to years of neglect of re-districting in the electoral system. Evidence is provided in Figure 5.3. The figure plots the old/young population ratio (over 65 vs 20–39) of each prefecture against the population per seat in each house (Upper and Lower Houses) of the Diet. Both lines are downward sloping. This means that a larger

share of the elderly is associated with a lower number of votes per seat. It is easy for older population prefectures to get a seat in the Diet.⁵¹

In summary, the old are systematically over-represented in the electoral system. The failure of election redistricting to reflect population movement of the young to the cities has biased the electoral system toward the old. In addition, older people are highly mobilised on issues of concern to them, while younger people are concerned about other issues, with diffuse preferences. In the end, therefore, it is hard to be elected without the old. Thus, in a freakonomically rational way, fiscal policy has been distorted so that the old benefit and the young pay. So long as the electoral system continues this structure, it will be hard to make the social decisions to correct the fiscal deficits. Economic growth is likely to suffer as well, due to distorted incentives to work and invest.

Figure 5.3 Old/young ratios vs. population/seat, by prefecture



Source: Japan Cabinet Office for population data, Ministry of General Affairs for data of Diet seats, and Morgan Stanley research calculations.

⁵¹ The Upper House election of 2010 provided a perfect example, in the contrast of results in Tokyo Prefecture and Tottori Prefecture. Tokyo has a population of about 12 million, and gets five Upper House seats in each election. The system works in a 'n-past the post' system, so that the candidates in Tokyo with the first through fifth most votes get the seats. In the last election, the sixth candidate received about 550,000 votes, but, being sixth, did not get a seat. In contrast, Tottori Prefecture has a population of about 600,000, and gets only one seat per Upper House election. Only the top vote-getter wins a seat. In the last election, the winner received about 160,000 votes. The population structure in Tokyo is young and that in Tottori is old. Thus, de facto, the young are disenfranchised by the current system.

5.4 The budget procedure problem

Looking at budget procedures, Chapter 2 distinguishes between the top-down delegation approach and the bottom-up contracting approach.⁵² In the delegation approach, a top-down, single individual (notionally the finance minister – sometimes a backroom politician telling the finance minister and the rest of the ruling party what to do) sets the agenda, decides the allocations, and enforces discipline. For this approach to work, there needs to be strong party discipline and strong power of coercion versus individual party members. In the contract approach, distributed power centres negotiate an agreement. For this approach to work, there needs to be transparency of objectives, negotiations, a public monitoring function, and discipline of transgressors. Note that the power centres need not be groups of politicians only; bureaucratic, business, and labour interest groups can be part of the process, to the extent that they support different political groups and have enforcement power over politicians.

Those familiar with Japanese budget negotiations will have no trouble characterising Japan's system as closer to the contract approach. Unfortunately, the contracts are unwritten, unenforceable and short-lived. A faint glimmer of improvement occurred in the FY2011 negotiations for the initial budget of CGGA, when Finance Minister Yoshihiko Noda set an overall spending limit loudly and publicly, and forced adherence. He also set an overall financing limit (¥44.3 trillion of new bond issuance), and forced adherence. However, the longevity of these victories remains at question. When the accounting is so partial, it is not clear that holding spending in an account that covers less than half of total spending will in fact succeed in achieving actual discipline.

At a deeper level, the contract approach is hobbled in Japan by several institutional problems. First is the non-philosophical basis of the two major parties. For complex historical reasons, both major parties include factions with diametrically opposed views on economic policy (eg big vs small government) – and often on foreign policy as well. As leadership shifts among the factions in each party, few will trust the credibility of any contract. The voters therefore do not trust either major party to carry through on promises. Second, leadership of both major parties is weak, reflecting the balkanised factional structure. When no one within a given party is strong enough to enforce an agreement with party colleagues, other political parties are unlikely to agree to anything.

Another problem is that transparency of budget decisions is virtually zero. The basic budget is drawn up by ministries between August and December, and a short period of re-negotiation occurs at the end of December, just when year-end vacation season distracts public attention. The Diet and vested interests are highly active through the entire process, but it is very hard for the general public to see what is being discussed, who is influencing the decisions, and even what the final outcome is.

Moreover, transparency is worsened by tradition. Common practice in Japan prevents the bureaucracy from providing budget information or background data to opposition parties. The logic for this approach is simple. The bureaucracy

52 See Von Hagen (2004 and 2006b).

works for the government, and the government is formed by the ruling party; therefore, it would be a violation of discipline for the bureaucracy to provide information to the opposition. Needless to say, this tradition makes it harder for opposition parties to challenge government analysis of spending priorities.

5.5 Budget screenings: An attempt at process improvement

The change of government in 2009, when the Democratic Party of Japan (DPJ) defeated the long-ruling Liberal Democratic Party (LDP), brought an attempt to improve transparency, in the form of 'budget screening' (*jigyo shiwake*). Essentially a campaign of 'name and shame', the budget screening was a set of DPJ organised committees, comprised of Diet members and private sector citizens,⁵³ who examined nearly 300 specific budget programmes, and made recommendations on whether to kill, cut or keep. The committee meetings were held not only in public, but were also broadcast, both by television and through webcasts. Public interest in the process was immense – as was bureaucratic interest, since the old rules for budget decision were now being challenged.

For each examined programme, there was a five-stage process. First, the bureaucrats in charge presented the content, the justification, and the impact of the programme. Second, a Ministry of Finance inspector gave MoF's assessment. Third, the Diet members on each committee gave their views of the politics of the needs being addressed. Fourth, the private sector members asked questions and made comments. Finally, the private sector members wrote evaluations on a single-sheet of paper, with recommendations on whether to kill, cut or keep. While the DPJ did not commit to honouring the recommendations of the committees, it did promise to give them adequate weight when formulating the budget. In the end, the committees identified about ¥1 trillion of immediate savings, with another ¥1–2 trillion of longer-term savings.

Although the budget screening exercise had a tinge of show trial and saved a rather small amount, it did accomplish some important goals. First, it opened the process of budget decisions to public scrutiny in a way never seen before. Second, it put the regular participants in the budget process on notice that their decisions could be examined in public, and therefore had to be justified on the basis of logic and efficiency.⁵⁴ Third, it created intense public debate on many issues, such as the national supercomputer project. That said, some weaknesses in the budget screening process were also obvious. Five such weaknesses stand out.

First, screenings should be carried out with an overall objective. Because the DPJ had not specified any growth strategy for the country, it was difficult for the committee members to put spending in context.

⁵³ One of the authors was a member of one of the original DPJ budget screening committees.

⁵⁴ For example, in the author's committee, the members repeatedly asked whether the mandatory calculations of cost/benefit ratios for projects had been done. They usually had been. However, when we asked how the cost/benefit ratios were used in the final decision on whether to implement a project, the answer was, 'We do not use them.' Prior to the budget screenings, the cost/benefit calculations were regarded as a nuisance. After the screenings, these calculations now have more weight.

Second, because the entire process was televised, it gave mixed incentives to the Diet member participants, that is, whether to use the committees to improve budget discipline or to advance their name recognition in the public. In short, the process included an invitation to populism.⁵⁵

Third, the qualifications of the committee members did not always fit the complexity of the decisions at hand. Any adversarial process creates incentives for participants to omit material information; hence, unless committee members are familiar with the issue at hand, they can be easily manipulated or misinformed – like trial juries.

Fourth, the choice of items to assess was not necessarily neutral. Because the selection was made by the newly elected political party, there was a natural tendency to examine the questionable projects of their predecessors most closely and to ignore their own questionable projects.

Fifth, the process was also subject to manipulation by bureaucracies. When a project that the bureaucracy had initially opposed was examined, the bureaucracy could do an intentionally bad job of defending it, and thus trigger a 'kill' decision.⁵⁶

Another signal of success of the budget screening process was the immediate use of exactly the same process by the LDP to attack spending priorities of the DPJ. Very soon after the DPJ's process ended, the LDP convened similar committees,⁵⁷ and did budget screenings of the DPJ's favourite programmes, such as the child allowance system and the free-road toll proposal.

Will the budget screening initiative become a permanent feature of the Japanese process? The signals so far are mixed. The DPJ did use the same process twice more, once to examine public sector corporations and special accounts, and once to examine regulatory rules that might be hindering growth. However, there were no new budget screening sessions in preparation of the FY2011 budget. With the high burden of dealing with the impact of the recent earthquake, tsunami and radiation issues, it seems unlikely that this promising initiative will re-emerge soon.

5.6 Taming the beast: The arithmetic of fiscal restructuring

Fiscal reform proposals in Japan have another common flaw: they often do not reflect simple arithmetic. For example, a common goal of fiscal reform plans has been to stabilise the ratio of debt to GDP. In the same breath, the plans also aim for a target of zero for the primary balance (compared to a deficit for 2008 estimated by the OECD of 5.0%). These goals are contradictory. For the debt ratio to be stabilised, the numerator and the denominator of the ratio must grow at the same rate. This happens when the primary balance as a percentage

55 In contrast, the old system of negotiations among vested interests behind closed doors gave no role at all to public opinion, until decisions had largely been finalised.

56 There is a role here for legal scholars to look at such adversarial processes, and see how rules of evidence and judgment could be introduced, in order to ensure fairness.

57 The relevant author was also a member of the LDP's budget screening committee. The process and the rules were identical to those used by the DPJ, by design.

of GDP equals the difference of the average interest rate paid on debt and the nominal growth rate, multiplied by the level of debt. As long as the interest rate exceeds the growth rate, a zero target for the primary balance is arithmetically insufficient.

Another common problem is the lack of specificity on the mix of tax hikes and spending cuts. Without such numbers, it is impossible for the populace to give direction to political leaders about public preferences. Why do leaders hesitate to make such proposals? A key reason is asymmetric incentives in the political system, in fact a manifestation of the common pool problem. Whatever is proposed, the opponents will be more vocal than the supporters. Hence, leaders are only rational when they refuse to take a clear stance.

Table 5.5 presents a set of combinations for tax hikes and spending cuts that would achieve the goal of debt ratio stabilisation. The initial conditions apply to 2008: general government debt was ¥971.9 trillion, and nominal GDP was ¥492.1 trillion, yielding a debt/GDP ratio of 198%. Over the last decade, the difference between the average borrowing cost and nominal GDP growth has been about 1.4%. Combining these figures, stabilisation of the debt ratio requires a primary surplus of about 2.8 percentage points of GDP. According to recent OECD estimates, the actual primary balance in FY2008 was a deficit of 5.0% of GDP. Hence, a swing of about 7.8 percentage points of GDP, or about ¥38.2 trillion is needed. This is the adjustment goal.

What combinations of tax hikes and spending cuts would generate a swing of the primary balance by ¥38.2 trillion? For simplicity, we use the consumption tax rate to give a general sense of the size of the hikes; this is a common approach in Japan, because it is widely believed (correctly) that a consumption tax hike would bring the fewest distortions to production and consumption. Section 2 of the Exhibit provides five scenarios, ranging from 0% of the adjustment coming from tax hikes (left-most column in the scenarios) to 100%. The corresponding needs for spending cuts are given in Section 4 of the Exhibit. In order to allocate the spending cuts across categories, the allocation is slightly adjusted 'across the board': public capital formation, current spending, and social spending bear cuts proportional to their shares of total spending (excluding interest costs and capital transfers, assumed to be fixed).

The results are interesting. At one extreme, a solution with no tax hikes would require a cut of overall spending by about 20%. Social spending would have to fall from ¥104 trillion to ¥82 trillion. At the other extreme, with no spending cuts at all, the consumption tax would have to rise to 24%. This is the snapshot arithmetic of fiscal reform.

What about the longer term? The pace of Japan's ageing is well known. What will these fiscal trade-offs look like in 2035? In order to answer this question, a more complete economic model is needed, one that includes productivity growth, inflation, tax elasticity, and spending controls. In short, the right answer to the question requires economics, not just arithmetic.

5.7 The economics of fiscal reform

The main problem with the arithmetic approach is a hidden assumption, that the economy would remain stable in the face of any of the tax-hike/spending cut combinations. Even the most ardent supply-sider or Ricardian equivalence advocate would struggle to justify such an assertion.⁵⁸ Even if true in the long run, it could not be true in the short run, and thus would have problems of political sustainability (Berkmen, 2011).⁵⁹

This observation implies that any fiscal reform plan will be contractionary, whether done through tax hikes or spending cuts. Hence, in order to stabilise the economy, alternative sources of demand must be found, while the fiscal consolidation is continuing. There are only two alternatives, foreign demand and domestic private demand. Thus, any successful fiscal plan must included measures to enhance productivity and competitiveness and/or raise domestic private demand.

For foreign demand, exchange rate policy is an obvious choice – at least for a single country. However, all of the major industrial countries now face serious fiscal problems. Thus, all would have to devalue versus the emerging countries, since they cannot all devalue against each other. To an extent therefore, G20 deliberations on exchange rates must be a part of the fiscal reform plans of the industrial countries. Whether the emerging countries would agree remains an open question.

This is why enhancing domestic private demand – without spending more money – is a key part of any fiscal reform strategy.⁶⁰ Reallocation of spending toward R&D is one alternative. (Of course, such a reallocation would make the cuts in social spending all the greater.) Alternatively, regulatory policies may provide new opportunities for growth. It is clearly important to link the fiscal and growth issues.

5.8 A growth-model approach to fiscal reform

How much productivity growth is needed to pay for the aged? How can spending control be implemented in such a model, in order to make it politically sustainable? What levels of inflation and benefit adjustments are possible and plausible? To explore these issues, we compute the growth of productivity needed to keep the share of transfers to seniors constant as a share of GDP, under the two ‘freeze’ scenarios described above.

58 In a recent conversation, a top official (political appointee) at the Ministry of Finance expressed the view that tax hikes would actually stimulate the economy. The idea was that tax hikes would spread such a relief about the future of the social security system going forward that older citizens would spend much more freely, and generate a net improvement in the economy.

59 For an econometric model of this matter, see Berkmen (2011).

60 There is an ambiguity about whether to call such policies Keynesian or supply side. For example, a regulatory change that increases investment demand – such as the deregulation of cell phone handset ownership in the mid-1990s – could be called a supply-side policy. However, a key impact of this supply-side policy was an explosion of business investment demand, as telecom companies built out their networks.

The structure of the model is as follows. Real GDP is determined by demographics and assumptions (which we use to construct scenarios) on productivity growth. Computing nominal GDP requires assumptions about the path of the GDP deflator: we foresee a gradual move from deflation now to a target level of inflation in 2015, after which the target level of inflation is maintained. Regarding fiscal policy, we assume that the elasticity of tax revenue relative to nominal GDP is 1.3x to derive total revenue.

The spending side is more complicated, in light of the politically difficult decisions to be taken. Because ageing is the key driver of fiscal spending, we separate total fiscal spending into the portion used for the elderly and the portion used for others. For the elderly, we posit an 'adjustment period' from now to 2017, and then a normalisation period. The growth of nominal spending per capita on the elderly is the control variable. Obviously, the difference between these nominal spending paths and the course of the GDP deflator determines whether the real value of per capita benefits for the elderly will rise or fall. For the non-elderly, we proceed in a similar way, but with different assumptions about the growth rates for nominal spending during the adjustment period and thereafter. A key determinant of the 'quality' of fiscal policy is the balance between the real spending implied for the elderly and the non-elderly. In some scenarios, we assume that a reallocation of spending toward the non-elderly will raise the growth rate of productivity.

Finally, concerning financial conditions, the average cost of borrowing for the government is the weighted average of its own history and the current inflation rate (the weights are 0.75 and 0.25, respectively). Total interest payments are then determined by the previous year's debt stock and this average cost of borrowing. This cost of debt is then added to the spending on the elderly and on the non-elderly to determine total fiscal spending for a given year.

Results for different scenarios are shown in Table 5.6. The results are meant to illustrate some natural policy measures and therefore to map out plausible actions. The baseline is reflected in the 'Do Nothing' scenario. This scenario leaves annual productivity growth at the recent average of 1%, and price change at the recent average of -1.0%, while freezing nominal spending per capita (on both elderly and non-elderly) at the current levels. Given demographics (and assuming that the deficits are somehow financed!), this baseline shows total spending at 49.9% of GDP in 2035, compared to 33.1% in 2008. The debt/GDP ratio rises to 685% of GDP – which suggests that the scenario is not sustainable. The other scenarios show how much would have to be done, instrument by instrument, to bring the overall deficit to around 0% of GDP by 2035.

Table 5.6 Macro/fiscal scenarios in a growth model: values for 2035

	Do nothing	Tax hikes	Productivity growth	Inflation	Spending cuts
Productivity growth	1.0%	1.0%	2.6%	1.0%	1.0%
GDP deflator rise	-1.0%	-1.0%	-1.0%	2.8%	-1.0%
Nominal spending growth	0.0%	0.0%	0.0%	0.0%	-2.5%
Deficit/GDP, 2035	21.0%	0.0%	-0.7%	0.3%	-0.2%
Debt/GDP, 2035	685.1%	509.2%	267.2%	298.7%	398.1%
Govt. spending/GDP, 2035	49.9%	48.4%	32.9%	37.8%	29.0%
Real GDP/capita (2000 ¥ million), 2035	5.40	5.40	8.12	5.40	5.40
Real spending/eldery (2000 ¥ million), 2035	3.89	3.89	3.89	1.97	2.07
Real spending/non-eldery (2000 ¥ million), 2035	1.20	1.20	1.20	0.61	0.64

Source: Morgan Stanley calculations.

Tax hikes, if used alone, would have to raise the tax-take to 48.4% of GDP (the discrepancy compared to the do-nothing case due to interest costs). This compares with about 28% of GDP in FY2008. It is hard to see how productivity growth would remain at 1%, in the face of a tax hike of 20 percentage points of GDP.

Productivity growth is the most attractive alternative. By raising productivity growth from 1% in the baseline to 2.6%, the debt/GDP ratio peaks at about 280% in the early 2020s, and declines modestly thereafter. Real spending per capita is maintained easily because productivity is so much higher; indeed, output per worker rises to ¥8.12 million in 2035, compared to ¥5.40 in the baseline. The problem with this scenario is how to achieve such a huge improvement of productivity growth.

Inflation could also eliminate deficits and stabilise the debt/GDP ratio, but at a major social cost. Real spending per capita falls by nearly 50% – because nominal spending is held down while inflation rises. This comparison suggests that political sustainability of the ‘inflation only’ approach would be low. The mix of productivity growth and inflation clearly matters, for a given level of nominal GDP growth.⁶¹ Moreover, in the real world, there would be a problem with indexation. Pensions and medical spending tend to be more indexed to inflation than other types of spending. Hence, the real cuts to the other types of spending – which are more likely to enhance productivity growth – would be larger. In short, the negative impact of inflation on productivity growth might also be problematic.

Spending cuts are the final alternative. As with inflation, the implications for welfare are dire. Annual per capita spending cuts of about 2.5% would be needed.

⁶¹ That is, for a given sum of the productivity growth rate and the inflation rate, a higher growth for productivity generates higher welfare. This is because the fiscal adjustment in the case of higher inflation comes from the gap between capped nominal growth of spending on the elderly and the general inflation rate.

Even with a 1% drop of prices every year, the impact on welfare would be huge. Moreover, the debt/GDP ratio in 2035 would be nearly 400%.

The qualitative conclusions from these scenarios are: (a) enhanced productivity growth is by far the most attractive approach to fiscal reform; (b) shortfalls in productivity growth would have to be filled with policies that would cause significant loss of welfare.

5.9 Prospects for fiscal reform

The causes of Japan's fiscal predicament are deeply entrenched in the Japanese fiscal, economic and political system. In light of this depth, is there any hope for improvement? Two aspects seem unpromising. There has been little public activity on the issue of reform of the public accounting system, although progress is allegedly in the works.⁶² Moreover, the speed of reporting of fiscal accounts remains hostage to the legislative schedules of regional governments.⁶³ Moreover, the statistical agency tasked with creating the national accounts remains deeply understaffed. With emergency priorities now shifted in the light of the recent natural disasters, it seems unlikely that the accounting and reporting issues in the fiscal realm will be addressed soon.

The same goes for the growth agenda. Since the end of the Koizumi government, growth strategy has been mostly an afterthought. The DPJ has produced two major documents on the issue, neither of which has had high priority in implementation or in the policy debate. Moreover, the second Kan Administration has tilted strongly toward tax hikes as the preferred method of fiscal deficit reduction, with virtually no reference to the impact such hikes would have on growth. The influence of influence of such hyper-Ricardians among top policymakers is a source of concern.

There is good news, however, on the third aspect, electoral reform. On 23 March 2011, the Supreme Court ruled that the current system for allocating Lower House seats among the prefectures is unconstitutional. In the Court decision, there were several references to the need for allocation of seats proportional to the population of prefectures – a ruling that will force the Diet to enact a system⁶⁴ very close to one-person-one-vote. In light of the Court decision, groups in both parties are beginning to work on a new system. Unless the new system is functional by September 2013, expiration of the term of the current Lower House, the election might be ruled invalid by the Court, if a suit were to challenge the result. Such a suit would be inevitable, in light of the activity of civic groups who have brought such suits for the last 40 years.⁶⁵

⁶² This statement is based on a recent conversation with a Ministry of Finance official.

⁶³ Final accounts cannot be released by local governments until approved by the local legislatures, which meet infrequently.

⁶⁴ The form of the election system for both houses of the Diet is decided by legislation, rather than by the constitution. Indeed, Article 47 of the Constitution of Japan says, 'Electoral districts, method of voting and other matters pertaining to the method of election of members of both Houses shall be fixed by law.'

⁶⁵ For a description of what is likely to happen to allocation of seats in the Lower House in the wake of the Supreme Court ruling, see Feldman (2011).

There is more good news with respect to the Upper House, where the voter disparities are even larger than in the Lower House. Civic groups have challenged the 2010 Upper House election in all 15 regional High Courts, and have won all 15 cases. These cases will now be appealed to the Supreme Court. It seems highly unlikely that the Supreme Court would overturn the decisions of all 15 of the regional High Courts. There is no clarity on the timing of a Supreme Court decision; however, the next Upper House election must occur by summer 2013. Hence, the court must rule relatively soon, in order for the Diet to enact and implement a new system.⁶⁶

5.10 Deflation and fiscal reform

Another common view is that markets will force fiscal reform, as the fiscal indicators worsen. Various observers use various metrics to put a time-scale on such an event. Some view the end of the Japanese current account surplus as the trigger for a bond market crisis; once Japan has to rely on foreign financing for deficits, so the argument goes, JGB yields will surge. There are several problems with this idea, however.

First, a current account deficit is neither a necessary nor a sufficient condition for a bond market crisis. A country with a current account surplus could suffer such a crisis if domestic investors shift their savings abroad. (This seems highly unlikely in Japan, despite a great deal of foreign investment, in light of the home bias of Japanese households.)

Another issue is when the current account balance might turn to a deficit. Table 5.7 shows a simplistic calculation, which extends the 2003–10 trend of the trade balance, setting the income and services balances at recent levels. It takes until 2023 for the current balance to turn negative. An alternative argument may be that the income balance is largely reinvested in foreign assets (eg reinvestment of Treasury bond coupons in new Treasury bonds). If this is the case, the key point is when the trade surplus goes into the red. This date is 2015.

One can approach the issue from the savings side as well. The size of private sector savings and their sustainability are questions. Figure 5.4 provides the answer. Household savings hit a trough of about 5.3% of GDP in FY2007, and rose with the financial crisis of 2008. Of the rise to 6.3% in FY2008, about 80% came from higher savings (numerator), and about 20% from the drop of GDP (denominator). In the meantime, household investment fell further, due to the recession. These trends continued in FY2009, and for now, the household sector has a savings surplus of about 4.4% of GDP.

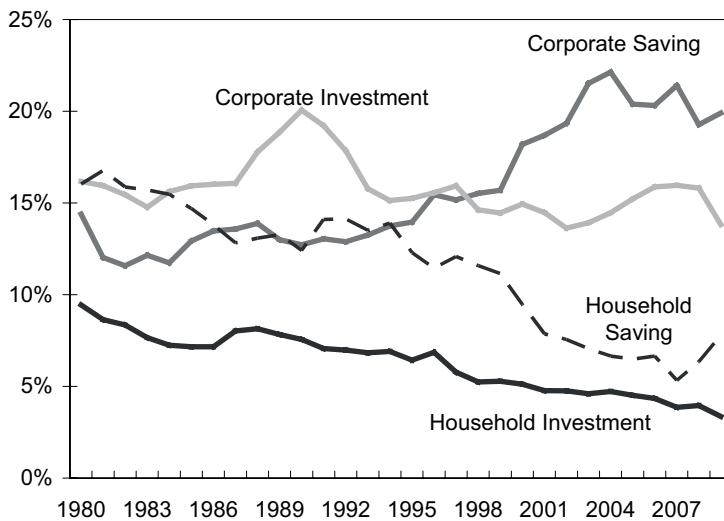
⁶⁶ For details on the issue involving the Upper House, and on the policy impact, see Feldman *et al* (2010) and Feldman (2010a, 2010b).

Table 5.7 Time trend projection of trade and current balances

	Trade balance	Services balance	Income balance	Current balance
2006	9.5	-2.1	13.7	19.8
2007	12.3	-2.5	16.3	24.8
2008	4	-2.1	15.8	16.4
2009	4	-1.9	12.3	13.3
2010	8	-1.5	11.6	17.1
2011	4.3	-1.4	10.1	13
2012	3.2	-1.4	10.1	11.9
2013	2	-1.4	10.1	10.8
2014	0.9	-1.4	10.1	9.7
2015	-0.2	-1.4	10.1	8.6
2016	-1.3	-1.4	10.1	7.5
2017	-2.4	-1.4	10.1	6.4
2018	-3.5	-1.4	10.1	5.2
2019	-4.6	-1.4	10.1	4.1
2020	-5.7	-1.4	10.1	3
2021	-6.8	-1.4	10.1	1.9
2022	-7.9	-1.4	10.1	0.8
2023	-9.1	-1.4	10.1	-0.3

Note: The services and income balances were set at their most recent levels. The trade balance is assumed to follow a time trend calculated from 2003 to 2010.

Source: Japan Cabinet Office, Annual Report on National Accounts, and Morgan Stanley Research calculations.

Figure 5.4 Saving and investment by corporates and households (% of GDP)

Note: Household sector includes households, small business, and non-profits serving households; Corporate sector includes both financial and non-financial firms.

Source: Japan Cabinet Office, Economic and Social Research Institute.

The corporate sector turned into a net saver in FY1998. In recent years, corporate saving has fallen. Until 2007, the recovery in business investment has reduced the net savings of the corporate sector, but the global recession has changed that. In FY2009, the corporate sector had net saving of about 6% of GDP.

These data suggest that deflation has been crucial in the stability of funding for the Japanese fiscal deficits. So long as Japan remains in deflation, the desire of the private sector to borrow and invest at home will be subdued. Low domestic investment has left sufficient private sector savings to fund the fiscal deficits and to fund overseas investment by Japanese entities (ie the counterpart of the current account surplus). The question, therefore, is what happens when deflation ends. There are two diametrically opposed views.

The conservative view is that an end to deflation would bring fiscal collapse. The reason is that inflation would bring automatic increases in bond yields, and render the budget untenable. Higher yields would cause a bond market panic, and make the situation worse. Moreover, the conservatives believe that tax revenues are low (in the CGGA, only about ¥40 trillion in FY2011) and the tax elasticity is small so that even higher nominal GDP growth would leave the deficits wider. Once yields start increasing, spending cuts and tax hikes could not be implemented fast enough to stop such a panic. Thus, claim the conservatives, deflation is better than the alternative. A milder version of this view is that ending deflation is alright, as long as it ends slowly. In contrast, the growth camp believes that yields will not increase one for one with inflation. Moreover, the growth camp is optimistic about the tax elasticity. In their view, growth is the only way to end the fiscal deficits. Any increase of bond yields would be mild, relative to the rise of revenue, in their view.

The key point of contention boils down to the relative impacts of higher inflation on tax revenue and average interest costs. If the elasticity of tax revenue is high, relative to the elasticity of average interest costs, then inflation will lower the fiscal deficit. If not, then inflation will worsen the fiscal deficit. Given the importance of this point, it is all the more crucial to have a firm understanding of the actual levels of fiscal spending and revenue, using the general government definition.

In a private communication, a senior official at the Bank of Japan (BoJ) indicated that the debt cost elasticity was 1.0, that the debt/GDP ratio was 200%, that tax elasticity was low, and that the tax base was ¥40 trillion (that is only the amount shown in the CGGA, as indicated in Section 5.2 above). With this set of assumptions, it is no wonder that the BoJ is reluctant to pursue an inflation policy. In contrast, our calculations suggest that the tax elasticity is about 1.3 and that the average debt cost elasticity is about 0.25 in the short run (but 1.0 in the long run). The tax base is about ¥140 trillion, in light of social security contributions and other sources of revenue. Our calculations suggest that inflation will help improve the fiscal situation, but cannot do so (at least not plausibly and sustainably) alone.

At the moment, the conservatives are in control. So long as this is the case, no attempt will be made to inflate the economy, even following the tragedy of the recent earthquake. Quite to the contrary, just after the quake hit, the leader of

the opposition LDP advocated tax hikes as a way to pay for reconstruction, along with spending cuts. Of course, some members of both political parties are pro-inflation.⁶⁷ However, these groups are a minority in both major parties.

Until there is a realignment of political parties that gives voters a choice between pro-and anti-deflation camps, those advocating peaceful coexistence with deflation are likely to remain in power. The reform of the electoral districting system will shift seats toward the cities, and could trigger such a party realignment. However, this is merely speculative. Knowing this, the bond market is likely to remain stable.

If anti-deflationary and/or productivity growth policies were adopted, then the bond market will notice, but need not collapse. Indeed, if the tax elasticity optimists are right, the end of deflation could reduce fiscal deficits. Moreover, if anti-deflation policies are accompanied by policies to enhance productivity growth, then Japan's fiscal problem would be well under control.

⁶⁷ For example, the DPJ's Anti-Deflation League (Defure Dakkyaku Giren) boasts 150 Diet members, out of a total of 412. This group has been ignored by the DPJ party leadership.

Appendix: The Tohoku earthquake and fiscal policy

At 2:46pm on 11 March 2011, an earthquake of magnitude 9.0 occurred approximately 70km off the coast of northeast Japan. The subsequent tidal wave (tsunami) was extremely destructive, reaching as far as 10 km inland in Japan, and leaving an estimated 23,000 dead and missing. The tsunami triggered meltdowns at the Fukushima nuclear power plant complex, which in turn will trigger immense costs, both for indemnities and reconstruction. The total cost from the earthquake, tsunami and nuclear accident is expected to run into many trillions of yen.

There are two aspects of the fiscal situation impacted by these costs. The first is the short- to medium-term issues of fiscal costs and financing of recovery. The second is the long-term question of how Japan, which heretofore had put nuclear power at the centre of its energy strategy, will find and fund alternatives in the face of public reaction to the nuclear accident.

Recovery Costs and Financing Costs

Sato *et al* (2011) simulate the impact of different movements of the yield curve on JGB yields and debt service, using the assumption that nominal GDP growth does not change from the baseline case. The crucial variable in their approach is the yield curve. In the base case, which assumes that the current structure of the yield curve persists, the debt/GDP ratio peaks at about 250% of GDP (Table 5.8). In their pessimistic case, the yield on the 10-year JGB rises by one percentage point, with corresponding rises in the rest of the curve, adjusted for maturity and monetary policy impact. Under these assumptions, the peak of the debt/GDP ratio is delayed by about 10 years, and the peak level of debt rises by about 40% of GDP. In their super-pessimistic scenario, there is a 3 percentage point rise in 10 year interest rates along with a steepening of the 2–10 year curve and a flattening of the 10–40 year curve. Even with the assumption that the consumption tax rises one percentage point each year until it reaches 10% (with the heroic assumption of no impact on GDP from the tax hikes), the results are predictably dire. The debt/GDP ratio spirals out of control.

Table 5.8 Interest rate assumptions for simulations

	2yr	5yr	10yr	20yr	30yr	40yr
Base case	0.20	0.51	1.24	2.03	2.17	2.34
Pessimistic case	0.45	1.01	2.24	2.78	2.92	3.09
Super pessimistic case	1.00	2.00	4.24	4.78	4.92	5.09

Source: Morgan Stanley research.

Thus, the impact of the quake on financing costs depends very heavily on whether investors retain confidence in the ability of the government to deal with the challenges. If so, then yields need not rise much, and the debt situation remains under control. If not, then a debt spiral is possible.

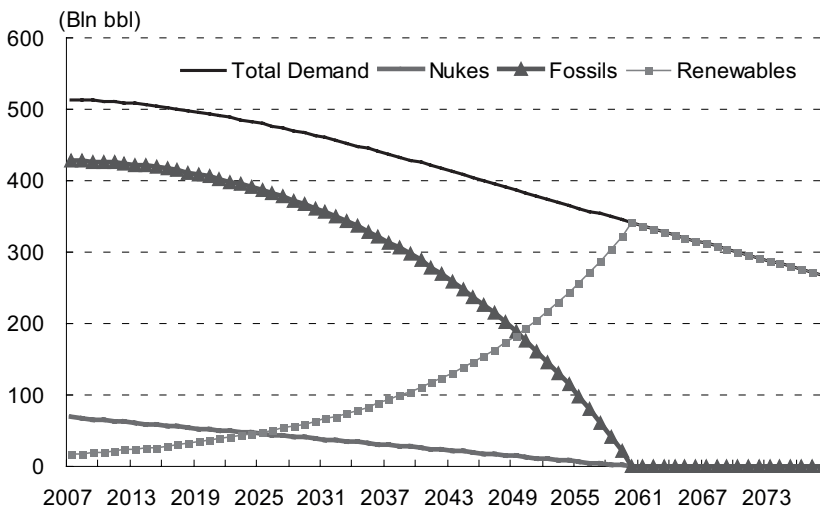
The energy issue

An even more profound issue concerns energy policy. A number of countries around the globe are rethinking their policies on nuclear power. Heretofore, resource-poor Japan has viewed nuclear power as a key element of its energy strategy. Even though the Japanese public has reacted less strongly to the Fukushima accidents than in some European countries, it will remain difficult to build new nuclear facilities in Japan for some time to come. Moreover, once a more comprehensive costing of nuclear power is calculated, the entire structure of energy policy may have to change. This issue is compounded by the need to reduce usage of fossil fuels, in light of global warming.

The situation for Japan is illustrated in Figure 5.5. Demand is assumed to follow population, keeping the current level of primary energy use per capita constant. As a result, total demand for energy declines along with the falling population.

The supply side distinguishes three sources of primary energy: fossil fuels, nuclear and renewables. We set the policy goal of eliminating the use of fossil fuels by 2060. (In light of likely fossil fuel shortages, the price of such fuels could become prohibitive in this time frame.) In addition, in line with the recent goal stated by Prime Minister Kan, that Japan should become nuclear-free, we allow nuclear power to wane over the same time frame. To replace the fossil fuels and nuclear power, a growth rate of renewable supply of 5.8% is required to balance demand and supply in 2060.

Figure 5.5 Energy supply and demand scenario, 2007–75



Source: Morgan Stanley calculations.

The fiscal issue is what the government must do in order to support a 5.8% annual growth rate for renewables. A major R&D budget in all aspects of energy supply and demand (new supply sources, efficient power distribution, energy conservation) would be needed. This in turn will require that fiscal resources be reallocated away from social programmes and toward energy programmes, in a way that balances the needs of the current generation for social services and those of future generations for a sustainable power supply. The earthquake and the aftermath thus make it all the more important to raise productivity, to end deflation, to reallocate spending, and to reform decision-making rules.

6 Recommendations

Europe, the United States and Japan all confront serious medium-term fiscal challenges. While the immediacy and exact nature of those problems differ, as we have seen in this report, they have in common that, on current policies, these economies' public debts are unsustainable. Not only has the burden of debt grown enormously in recent years, but substantial primary deficits remain and policy adjustments so far have been insufficient. And all three economies face the prospect of very significant age-related increases in public spending going forward, implying that further adjustments will be needed beyond those necessary to achieve medium-term stability of debt to GDP ratios.

It is conventional to follow such observations with recommendations that governments cut back on expenditure and raise additional revenue in some proportion, now and/or in the future. We will, of course, have our own recommendations along these lines for all three economies. But, in addition, we will emphasise two overarching principles around which any strategy for restoring public debts to sustainable levels should be organised.

The first one is that the debt-to-GDP ratio has not just a numerator but a denominator. The least painful way of reducing that ratio, in other words, is by growing the denominator. Put another way, any strategy for shrinking the numerator through a combination of spending cuts and tax increases will not make the debt sustainable insofar as it also shrinks the denominator. This is an issue in the United States, where much of the controversy over the recent agreement to raise the debt ceiling revolves around the question of whether the debt deal will do more to help or hinder growth. It is an issue in Europe, where sharp cutbacks in public spending in the UK and southern Europe have depressed growth, and where a long-lasting series of increases in tax rates caused a decade and a half of depressed growth in Germany without solving the underlying fiscal problems (see Strauch and Von Hagen, 1999). It is an issue in Japan, where the rise in the debt ratio to levels that are exceptionally high even by comparison with the US and Europe reflects in large part the economy's inability to break out of its low-growth trap. It follows that in all three cases strategies for reducing the rate of increase of the debt must also be strategies for boosting the medium-term rate of growth if they are to succeed in putting the debt burden on a sustainable footing.⁶⁸

⁶⁸ Another way of raising the denominator is, of course, through inflation. Although moderate inflation can in principle play a role in eroding the debt/GDP ratio in circumstances where debt is reasonably long term, it is clearly not a desirable approach to solving the problem, as it has adverse efficiency and distributional effects.

Second, good intentions are not enough; also necessary are good institutions. Chronic deficits, as we have seen, reflect the common-pool problem that characterizes public-finance decisions. Those who benefit from specific forms of public spending, including tax expenditures, are not in general the same individuals or groups who pay for them, either now or, as is the case when debt is incurred, in the future. The beneficiaries therefore do not internalise all the costs of that current spending. Appropriate institutional arrangements are therefore needed to correct this quasi-market failure. For the economist to simply identify the utility-loss-minimizing set of public spending cuts and revenue increases and to imagine that they will be implemented is equivalent to assuming the existence of a benign fiscal dictator, something that is mythical in a modern democratic political setting. What is necessary, rather, is an institutional mechanism to align incentives. The precise nature of the institutional mechanism in question will depend on the precise nature of the political setting. What is needed therefore is institutional reform where prevailing institutions do not meet the needs created by the political setting, and political (electoral) reform where the political system creates problems for the operation of prevailing fiscal institutions.

6.1 Institutional reforms

As discussed in Chapter 2, budgeting institutions appropriately designed to address the common-pool problem differ from country to country. Depending on the electoral system, the degree of electoral competition and the resulting make-up of governments, some countries must rely on the delegation approach while others need to develop the contract approach to the budget process. The eurozone has the additional problem of powerful cross-border spillovers of national fiscal outcomes. Insofar as there is the possibility that fiscal problems in one member state will be met by bailouts or monetary accommodation, the costs of which fall in part on the residents of other member states, this introduces an additional, potentially more severe common pool problem.

Countries with parliamentary governments, proportional representation electoral systems, large electoral districts, and a high degree of electoral competition tend to have coalition governments with frequent changes in the party composition of the governing coalition, and a relatively large ideological distance between the parties in the government. These countries need to develop effective contracts-based fiscal institutions in order to contain debt and deficit problems.

Countries with parliamentary governments, first-past-the-post electoral systems, and small district magnitudes will tend to have majoritarian governments and therefore less need to start the budget process with upfront negotiations among different factions of the government. They can most effectively address the deficit-bias problem through a delegation approach which assigns significant powers to the finance minister, who typically is not bound by particular spending interests as much as the spending ministers.

Presidential countries, in which power is shared between the executive and legislative branches of government, present particular challenges, especially when different political parties control the different branches of government. In these cases, negotiated budget agreements are needed, analogous to those in parliamentary coalitions. However, unlike parliamentary coalitions, where the failure to establish and abide by negotiated agreements is penalised by the government falling, presidential systems generally lack any mechanism to force these agreements to be reached. Presidential countries therefore have a tendency toward inaction, making it difficult for fiscal adjustments to occur when deficits arise. In such countries, it is particularly important to have a prominent organisation free of political interference to make budget projections so that public opinion can be marshalled to encourage action. In addition, institutional features that raise the costs of inaction can be helpful in offsetting the bias toward inertia.

Table 6.1 divides the budget process into several phases – the drafting phase of the budget law, which in most countries happens within the executive branch of the government, the legislative phase, in which the budget law is passed through the legislature, and the implementation phase, during which the executive is responsible again. The table also shows the main steps involved in each phase.

Table 6.1 The budget process in European countries

Budget process	Contracts	Delegation
Drafting phase		
Initial economic and revenue forecast	Independent forecasting institution	Ministry of Finance (MF)
Targets for major aggregates	Derived from multiannual programme negotiated among all ministries and party leaders	Set by MF
Compilation of budget draft	Bids submitted by line ministries, MF checks for consistency with targets	Bids negotiated between line ministries and MF
Reconciliation of conflicts	Negotiations among party leaders	MF with PM
Legislative phase		
	Strong information rights	Weak information rights
	Amendments weakly restricted.	Amendments strongly restricted
Final approval	Legislature	Executive
Implementation phase		
	Spending approved and cash flow controlled by MF	Spending approved and cash flow controlled by MF
Scope for changes	Require cabinet approval	Require MF approval
Reaction to unforeseen developments	Detailed rules and/or cabinet approval	MF discretion

6.1.1 The budget process in parliamentary governments with contracts

Fiscal contracts address the common pool problem by a common agreement on the budget among the partners of a coalition. The budget process starts with negotiations in which the main budget parameters are fixed for the remainder of the process, typically numerical spending ceilings for the main line ministries and budget aggregates. These parameters must be specific enough to express the government's willingness to address spending cuts in politically sensitive areas. These negotiations involve all cabinet members and often also the leaders of the coalition parties. Once the targets have been set, it is understood that deviations from them during the fiscal year in the interest of one of the coalition partners will be punished by the withdrawal of other parties from the coalition, causing the government to fall. To emphasise their political weight, some governments have the legislature pass a pre-budget law fixing the main budgetary targets for the next year. During the compilation of the budget law, any conflicts that arise are ultimately resolved by negotiations in the entire cabinet.

The annual budget targets should be derived from multiyear fiscal programmes set out in the coalition agreement. They must be based on reliable macroeconomic projections, which gives the economic and revenue forecasts for the budget year special strategic importance. To assure the transparency and accuracy of these forecasts, governments can outsource them to independent forecasting agencies.

⁶⁹

During the legislative phase, the parties in the legislature examine the budget draft and assure its consistency with the coalition agreement. Information rights of the legislature are strong and the scope of amendments that members of parliament can propose is large. In the implementation phase, making fiscal contracts work requires that the finance ministry be able to effectively monitor the spending ministries during the budget year and assure that the targets are kept. Tight control over cash flows is a necessary requirement for this. Often, fiscal contracts come with rules spelling out what the government will do under unforeseen circumstances, that is, how unexpected revenue shortfalls will be handled or what will be done with unexpected revenue surpluses. Changes in the budget during the year, which are not covered by such rules, require the consent of the entire cabinet.

The European experience of the past 20 years has shown that fiscal contracts can be strengthened considerably by fiscal rules, which are typically in the form of numerical limits for government debt or deficits based on special or constitutional law. Such rules can anchor the multiannual fiscal programme on which the annual fiscal contracts are based and they give additional political and legal weight to the fiscal targets. More specifically, countries with political environments favouring fiscal contracts have often used the SGP framework to develop and strengthen fiscal contracts at the national level (Von Hagen, 2006b).

⁶⁹ Jonung and Larch (2008), von Hagen (2011).

6.1.2 The budget process in parliamentary governments with delegation

The delegation approach addresses the common pool problem by vesting the finance minister with strong agenda-setting powers over the spending ministers, that is, the finance minister can unilaterally or jointly with the prime minister set the main parameters of the annual budget. Economic and revenue forecasts are the responsibility of the finance minister, who also has the authority to resolve conflicts arising during the compilation of the budget draft. In the legislative phase, the executive has strong agenda-setting powers over the legislature, which is restricted in its information rights and the scope of amendments it can make to the executive budget proposal. During the implementation phase, the finance minister must have the power to execute the budget tightly by controlling cash flows and approving all expenditures during the year, thereby assuring that no deviation from the original budget occurs. In this model, the commitment power is provided by the relative independence of the finance minister from political spending interests. The stamina required for good-quality consolidations is provided by the stability of the finance minister's position in the government. There is much less of a role for multiannual fiscal programmes and fiscal rules in this model. This is because the delegation model lacks the enforcement power that the contract approach provides for coalition agreements and rules. Strong finance ministers can decide to deviate from a multiannual programme or rule without having to fear political punishment. This is consistent with the European experience of the past 20 years, which indicates that the SGP had little binding power in countries with political environments favouring the delegation approach (Von Hagen, 2006). Multiyear fiscal programmes and fiscal rules may be useful under the delegation approach to improve transparency and guide public expectations, but their influence on the actual conduct of budgetary policies remains quite limited.

6.1.3 The budget process in the US presidential system

The contract approach that is required in the US presidential system is different from that in the European parliamentary systems. In the US, the annual budget process begins in late January or early February with the president's submission of a budget to Congress and the Congressional Budget Office's publication of baseline budget projections. The extent to which the president's budget proposal becomes the basis for the Congressional appropriations legislation depends on the relationship between the president and Congress. Next the House and the Senate pass budget resolutions specifying total discretionary spending levels and making suballocations to the appropriations subcommittees in each chamber. When the system is working well, the respective suballocations are the same in the House and the Senate, eliminating the need to make cross subcommittee adjustments at the end of the process when the House and Senate appropriations bills are reconciled. In theory, the one dozen appropriation bills produced by the subcommittees are enacted separately before the 1 October start of the next fiscal year. During the past decade, however, the full appropriations process has never been completed in time for the start of the fiscal year. Instead, one or

more continuing resolutions are enacted, allowing the government to continue operations at the prior year's spending levels until the budget process completes. Then an omnibus appropriations bill, combining most or all of the individual appropriations bills, is passed by Congress and signed by the president.

In this setting, the contracts approach requires three agreements, one between the president and the leaders of the House and Senate, a second between the speaker of the House and a majority of House members, and a third between the Senate majority leader and a majority (or in some cases 60%) of Senate members.⁷⁰ The first agreement is necessary in order to reconcile the separate versions of the budget legislation that emerge from the House and the Senate and to obtain assurance that the president will sign rather than veto the legislation that Congress produces. The second and third agreements are necessary because there is much less party discipline in the US Congress than there is in European parliaments. In the US, Congress does not fall if the speaker of the House or Senate majority leader loses a vote. So party members have more freedom to vote against their party leadership. In addition, members of Congress are elected more as individuals and less as party members than is typical in parliamentary systems.

The budget process described above applies to discretionary spending. Fiscal consolidations involve changes to mandatory spending and revenue as well. These happen on an ad hoc basis, but require the same three-agreement structure to become law.

Table 6.2 shows predicted and actual institutions for different European countries, the eurozone, the United States and Japan. Here, we define fiscal rules as numerical limits on government debt or budgetary aggregates legislated by the constitution or special law and addressing the central or general government. The predictions regarding the type of budget process are based on the countries' electoral systems and the competitiveness of their electoral processes, in line with the arguments presented in Chapter 2. The classification of their actual budgetary institutions is based on recent literature. Note that we only indicate the type of budgetary institutions, not their quality. The table shows that, by and large, the predictions are borne out by actual observations quite well. Finally, the table also indicates where special institutions like fiscal councils exist.

⁷⁰ From this perspective, such a contract would be similar to fiscal contracts under minority governments which are relatively frequent in Scandinavian countries. See Hallerberg et al (2008).

Table 6.2 Actual and predicted budgetary institutions

	Rule	Institution	Predicted type	Actual type
Belgium	No	High Council of Finances	Contract	Contract
Bulgaria			Contract	Contract
Czech Republic	No		Delegation	Contract
Denmark	No		Contract	Contract
Germany	Golden rule	Advisory committees	Delegation/ contract	Delegation
Estonia	No		Contract	Contract
Ireland	Expenditure ceiling		Contract	Delegation
Greece	No		Delegation	Delegation
Spain	Budget balance		Delegation	Delegation
France	No		Delegation	Delegation
Italy	No		Delegation	Delegation
Cyprus				
Latvia	Golden rule		Contract	Contract
Lithuania	Debt rule		Contract	Contract
Luxembourg	No		Contract	Contract
Hungary	No	Fiscal committee	Delegation	Delegation
Malta				
Netherlands	No	Independent forecasting institution	Contract	Contract
Austria	Budget balance	Fiscal committee	Contract	Delegation
Poland	Debt rule		Contract	Contract
Portugal	No		Delegation	Delegation
Romania		Fiscal committee	Contract	Contract
Slovenia	No	Fiscal committee	Contract	Contract
Slovakia	No		Contract	Contract
Finland	No		Contract	Contract
Sweden	Yes	Fiscal committee	Contract	Delegation
United Kingdom	Golden rule	Fiscal committee	Delegation	Delegation
Euro area	Yes	None	Contract	Contract
USA	Nominal debt ceiling	Congressional Budget Office	contract	Ad hoc agreements
Japan	No		Contract	None

Sources: Hallerberg et al (2009), Yläoutinen, Sami, Development and Functioning of Fiscal Frameworks in the Central and Eastern European Countries. Phd Dissertation, University of Jyväskylä, 2005, European Commission DG ECFIN, Public Finances in EMU, 2006, Part III Annex, pp. 162–4.

6.2 European countries

The Maastricht Treaty requires EU governments to adopt national budgetary institutions that enable them to keep their commitment to sustainable public finances. While Table 6.1 indicates that European countries have generally moved in the right direction regarding type of budgetary process, empirical research suggests that large differences in the quality of budgetary institutions remain and that there is much scope for improvement (Hallerberg *et al*, 2008). The Appendix examines a few cases, some successful, some not. We recommend that countries recognise the institutional approach that best fits their political environments and introduce reforms at the national level to improve them significantly.

Furthermore, we recommend the creation of fiscal councils in all EU countries. Such councils can improve fiscal discipline by commenting publicly on the quality of a government's actual and planned policies, thereby creating more democratic accountability. In a setting of fiscal contracts, fiscal councils can play an important role judging the quality of the fiscal contract, its consistency with longer-term fiscal objectives, and the quality of its implementation. They can also improve the political feasibility of spending cuts by explaining their necessity and expected effects from a non-partisan perspective. In a setting of delegation, fiscal councils can play an important role of holding the finance minister accountable for how he uses his agenda-setting powers and by commenting on the consistency of the government's policies with longer-term fiscal objectives and the effectiveness of the government's coping with longer-term fiscal challenges such as ageing or the necessity to reduce public debts.

To play such a role, fiscal councils must be clearly independent from the governments. They should be appointed by the national parliament rather than the executive and their mandates should not be overly restrictive, allowing them to address specific issues and make specific proposals. Fiscal councils should be given sufficient access to data and information, for example by being able to call on the central banks' economics departments for support. Governments should not have the possibility to dismantle the fiscal councils nor to deprive them of their resources. The council members should be individuals with proven (international) experience with fiscal policy or strong international academic reputation.

6.3 The Eurozone

Then there is the common pool problem facing the eurozone as a whole. Problems of fiscal sustainability in one eurozone country can impose costs on residents of other eurozone countries through a number of distinct channels. They can be managed through cross-border transfers ('bailouts'), as has been the case in the recent past, or monetary accommodation, which the ECB has begun by engaging in since May 2010 via large-scale purchases of government bonds of fiscally weak countries. The Stability and Growth Pact resembles the kind of fiscal contract national coalition governments have used successfully to

strengthen fiscal discipline. However, it lacks the enforcement mechanism that is necessary to make fiscal contracts effective at the national level. Neither the European Commission, which has been degraded to a mere record keeper for the national Stability and Growth Programmes, nor the European Council have the political power nor the determination it takes to enforce the fiscal contract at the EMU level.

The reformed Stability and Growth Pact is meant to achieve better enforcement through changes in decision-making rules. Previously, decisions to impose fines on countries found in violation of the Pact were taken by a majority of eurozone member countries. Earlier this year a new proposal was considered that would allow sanctions imposed by the European Commission to come into effect unless there was a majority of votes against the sanctions (this is the so-called reverse majority rule). But there is little reason to believe that this reform will lead to a more efficient arrangement. The Commission relies on the good will of the member states' governments in a host of other areas and will avoid as much as possible making contentious proposals. Furthermore, at the end of the day, neither the European Commission nor the European Council has the power to enforce decisions against the resistance of a member state, for the simple reason that the member states remain sovereign in fiscal matters.

If member states are to retain fiscal policy sovereignty, the solution must be first and foremost sought at the national level. Since one size will not fit all, these solutions cannot be identical.

We suggest therefore that every eurozone member country adopt a combination of rules and institutional arrangements appropriate to its own political circumstances. This implies the acknowledgment that the one-size-fits-all approach, which has dominated the fiscal framework of the eurozone so far, is inappropriate. The SGP framework rests on the assumption that multiyear fiscal contracts work in all member states. This is clearly not true. At the same time, as previously noted, much can be learned from existing rules and arrangements in place in a number of countries, in Europe and elsewhere. The collective interest can be served by providing compelling incentives for eurozone member countries to adopt and respect budgetary arrangements that are adequate given the parameters of their political and electoral systems.

This could be done as follows. The European Commission would evaluate existing or planned national arrangements and approve those that are likely to be effective in dealing with the deficit bias. Countries that fail to pass this requirement, or countries that breach their own arrangements, would face a serious disadvantage: their debt instruments would not be accepted as collateral by the European Central Bank in money market operations. As a result, public debt would be more expensive. With full reinstatement of the no-bailout clause, these countries would soon find it in their interest to comply.

6.4 The United States

As a presidential country with a frequently divided government, the US and its 'checks and balances' system has a bias toward inertia that in theory should make it difficult to address fiscal imbalances. Yet, the US political system has historically performed quite well in correcting fiscal imbalances. Major deficit-reducing legislation was enacted in 1983, 1990, 1993 and 1997. In part because of these policy actions, the federal debt to GDP ratio fell from 49% in 1993 to 33% in 2001. Three questions arise from these observations. First, why has the US system been so successful? Second, should we expect this success to continue? Third, are there institutional changes that could increase the likelihood of success going forward?

It is impossible to give a definitive answer to the question of why the US political system has done better in addressing fiscal imbalances than might have been predicted. A plausible answer is that voters are not focused solely on minimising their tax payments and maximising the government spending they receive. Voters also care deeply about the health of the economy. If fiscal imbalances are perceived to threaten the health of the economy, voters will reward elected officials who correct those imbalances. Voters also reward political leaders whom they perceive as 'doing what's right for the country'. Thus, the common pool problem is only one aspect of what drives the politics of fiscal policy in the US.

Will the US political system continue to be capable of fiscal adjustments? Most likely, the answer is yes. Although the US Congress is steadily becoming more polarised, this is simply a continuation of a trend that began around 1970 (Poole, 2005). The increase in polarisation between 1970 and 1990 did not prevent the budget deals of the 1990s. While the recent debt limit debate was contentious and failed to result in a comprehensive fiscal plan, similar contentiousness and false starts preceded the budget deals of the 1990s. So long as a policy adjustment of 1–2% of GDP occurs every 3–4 years, debt to GDP will be stabilised. Thus, the political system can fail to reach the necessary agreements in most years, and still function well enough to produce fiscal sustainability.

Despite the past success of US institutions, it is worth considering whether they could be made stronger. Since the 1980s, the favoured approach to overcoming inertia has been to negotiate deficit reduction packages in multiple stages. First, legislation is passed establishing multiyear targets for the amount of deficit reduction to be achieved and the consequences, typically across the board cuts in spending, if subsequent legislation is not passed to achieve the targets. Then decisions are made about the specific policies needed to reach the targets.

The recently passed debt limit legislation follows this pattern. It sets caps on discretionary spending for every year through 2021, reducing 10-year spending by \$900 billion relative to the baseline. However, it does not specify any of the specific spending reductions necessary to reduce spending to the target levels. It also requires Congress to pass legislation by 15 January 2012 reducing the deficit by a further \$1.2 trillion over 10 years. If Congress fails to produce \$1.2 trillion in savings, automatic spending cuts go into effect beginning in 2013 to achieve the

\$1.2 trillion in savings. Many programmes, including Social Security, Medicaid and certain programmes benefiting low-income populations are exempt from the automatic cuts. Cuts to Medicare are capped at 2%.

The appeal of this approach is two-fold. First, by obtaining agreement in two stages – first on the amount of deficit reduction to achieve and only later on specific revenue increases and spending cuts – it may make reaching a consensus on the specific policy changes easier. Second, by specifying automatic cuts if no agreement is reached – cuts explicitly designed to be unappealing to both Democrats and Republicans – it raises the cost to the president and Congress of failing to come to an agreement.

As was discussed in Chapter 3, these sorts of procedures have had mixed success in the past, especially when the required adjustments have been large. Congress can simply decide at a later date to pass a new law overriding them. The most likely scenario for the coming year is that Democrats and Republicans will fail to reach agreement on specific tax increases and spending cuts by the deadline of 15 January 2012. Then, after the November presidential election, the confluence of the start of a presidential term, the imminent (31 December) expiration of the 2001/2003 tax cuts, and the desire to avoid the automatic spending cuts will produce decisions about the specific policy changes necessary to stabilise debt to GDP over the medium term.

It is also possible that an agreement will be reached by January. But given the zero-sum-game nature of the upcoming elections, an agreement would require Democrats and Republicans to simultaneously believe the legislation was to their respective advantages. While there are sometimes cases in which incumbents of both parties come together in such a way that helps all incumbents, regardless of party, relative to challengers, this seems unlikely to be the dynamic for the 2012 election cycle.

It is common for elected officials to propose balanced budget amendments to the US constitution. These proposals are usually not serious ones. They are simply a way for the politician to tell voters that he or she dislikes deficits, without having to propose the unpopular tax increases or spending cuts necessary to actually improve the fiscal outlook.

Most of the Congressional proposals for balanced budget amendments have been poorly designed. They typically require balanced budgets in each year, regardless of the state of the economy. One recent version would require two-thirds supermajorities in both the House and Senate to raise any taxes – making deficit reduction more difficult. Another recent version would cap annual federal spending at 18% of GDP, a level that is several percentage points below the spending levels in any serious budget plan.

But given that any legislated deficit reduction procedure can be negated by subsequent legislation, it is worth considering whether it would be possible to design a serious constitutional amendment that would help overcome inertia in closing fiscal imbalances. Such an amendment would need to establish targets for fiscal balance (the German balanced budget amendment restricts federal deficits to 0.35% of GDP). To avoid exacerbating economic downturns, it would need to make provisions to allow for countercyclical fiscal policies, while simultaneously

avoiding a situation in which economic conditions are inappropriately appealed to as an excuse to ignore the budget targets. To avoid having fiscal policy decisions constantly being litigated in court, it would need to have clear consequences for what happens if targets are missed (for example automatic proportionate increases in all tax rates and automatic proportionate reductions in all spending). Finally, because it is impossible to foresee all eventualities, it should be possible to waive the requirements of the amendment with a Congressional supermajority.

Whether it is possible to design an amendment of this sort whose benefits outweigh the costs of lost economic policy flexibility is an open question. We have seen in the recent debt limit negotiations that artificial attempts to force action can be destabilising.

Regardless, no such amendment is imminent. The process for amending the US Constitution is difficult. It requires a bill to pass both houses of Congress by a two-thirds majority. Then the amendment must be ratified by three-fourths of the states. The most recent Constitutional amendment took 202 years from the time it was initially proposed to the time it achieved ratification by the states. The second most recent amendment was in 1971. Thus, meaningful progress in improving US budget institutions is more likely to come through improving the enforcement mechanisms for multiyear budget agreements in such a way as to increase the probability that the agreed upon targets hold.

Recently the Peterson-Pew Commission and the Obama Administration have made useful recommendations for such improvements.⁷¹ For example, to minimise the chance that overly aggressive targets get ignored or overridden, the Peterson-Pew Commission recommends capping the automatic adjustment at 1% of GDP per year. The Obama Administration suggests specifying the fiscal targets based on debt to GDP levels so that if deficit targets are missed in a single year, the following year's adjustments will have to increase by enough to stay on the agreed upon path.

The US political system's bias toward inaction raises particular challenges for mandatory spending programmes where spending is determined by a prior law and not appropriated annually. In the US, most of the large social insurance programmes are on autopilot. Thus spending on Social Security retirement benefits and Medicare health benefits are increasing significantly as a share of GDP based on eligibility rules set many years in the past. Given the popularity of these programmes and the status quo bias of the political system, reforms are very hard to enact. This inertia could be overcome in one of two ways. The first would be to subject these programmes to annual appropriations so that there would be an annual opportunity to trade off spending on social insurance programmes against spending on other priorities. However, such a process might result in higher spending on these popular programmes rather than lower spending. Moreover, it would make benefit levels less predictable, raising economic uncertainty for vulnerable populations.

A second way to overcome this inertia would be to make the programmes completely self-financing and to institute trigger mechanism to ensure that

⁷¹ Peterson-Pew Commission, *Getting Back in the Black*, November 2010 and The White House, 'The President's Framework for Shared Prosperity and Shared Fiscal Responsibility', 13 April 2011.

spending and revenues remain equal. Sweden's Social Security system includes a 'braking mechanism' designed to keep benefits in line with the payroll tax base (Auerbach and Lee, 2009). In the US, proposals have been made to index Social Security benefits to longevity.

Proposals have also been made to fund Medicare and Medicaid via a dedicated revenue source like a VAT. If that were done, spending on Medicare and Medicaid could be limited to the revenue raised by the VAT, thereby requiring Congress to actively decide to raise VAT tax rates any time government health care spending rose relative to GDP.

One place where the US institutions do not need improvement is in providing independent economic and budget estimates and analysis. The Congressional Budget Office is widely seen as non-partisan and as producing authoritative estimates of both the short-run and long-run budget outlook and of proposals being considered by Congress. The independent actuaries of the Social Security and Medicare systems are also widely respected. Moreover, because the executive branch maintains its own revenue and budget analysis capacity at the Treasury and the Office of Management and Budget, there is a healthy dialogue among the civil servants at the various agencies that leads to more accurate modelling.

While the fiscal councils in Europe sometimes make policy recommendations, the US is well served by a system in which the Congressional Budget Office refrains from making policy recommendations, thereby preserving its reputation for independence. The active Washington think tank community often forms bipartisan commissions of experts that make recommendations similar to those that the more activist fiscal councils in Europe make.

6.5 Japan

So long as the houses of the Japanese Diet contain both first-past-the-post and proportional electoral sections,⁷² Japan can have neither a pure delegation nor a pure contracts system. At present, the system is more skewed toward the proportional system, even though the allocation of seats is not truly proportional (see Chapter 5 for details). Therefore, Japan should concentrate on improving the quality of the contracts, which, at the moment, are unwritten, unenforceable and short-lived. Ideas might include both a priori and ex post checks. The former would include mandatory scoring and publishing of political party platforms, by an independent agency.⁷³ The latter would include scorecards on bills enacted by the Diet, so that the public could gauge the actual fiscal impact. Improved media scrutiny would also help; standards for expertise in financial journalism should be raised, by a private sector self-regulatory body.

72 Japan's Lower House is a hybrid. Of the 480 Lower House seats, 300 are selected in a 'first past the post' system, as in the US. The remainder come from 11 blocs, similar to 'large district proportional' systems in Europe. The Upper House is also a hybrid, but more tilted toward proportional allocation. In the Upper House, 196 members are elected from medium-sized districts, with each prefecture being one district. There is an '*n*-th past the post' system, where *n* depends on the population of the prefecture. The remaining 96 seats are selected from a nationwide constituency, on the basis of a party list system.

73 The Dutch CPB (discussed in the Appendix to this chapter) and the Congressional Budget Office in the US are examples of such institutions.

A key reform would be to end the skew in Diet representation toward the elderly. This requires at least a move to a one-person-one-vote redistricting for both Houses of the Diet. For example, in the 300 seats subject to the 'first past the post' system in the Lower House, a shift to one-person-one-vote would take about 20 seats away from the most rural districts and add all to the most urban ones. It would be easier to achieve fair seat distribution with larger election districts, for example by moving away from prefectures and toward states (there would be 9 to 13 such states, according to plans proposed so far). Already, an 11 block system exists for the proportional part of the Lower House, and seats are allocated on the basis of voting population only. This reduces the number of dead votes, and produces a Diet more reflective of the population.⁷⁴ Special attention would have to be paid to avoid gerrymandering of smaller election districts (if any) inside states, in order to avoid the polarisation that gerrymandering in the US has brought. Such changes would end the overrepresentation of the elderly because the latter live more densely in rural areas, which the current system over-represents.

Another important reform would be to reduce the number of representatives, in both the national Diet and in local assemblies. The large number of representatives forces attention of each on relatively small groups of supporters, and thus tilts representation toward parochial interests. A reduction in the number of representatives could be accomplished in several ways. For the national Diet, simply reducing the number of seats might be easiest. Eliminating the proportional section of the Lower House would shrink that House substantially, and would add an element of 'delegation model' to budget debate. The Upper House could be reduced to as few as 67 seats (in a system with 11 blocks) with no loss of one-person-one-vote equality. Alternatively, the Upper House could be reduced to a two-seat, 'double presidency', without changing the constitution.⁷⁵ In this variant, there would be a single national constituency, and the top vote-getter would win. Such an Upper House, although legally permitted to initiate non-budget legislation, would largely serve as a check on the Lower House, in order to ensure that the parochial interests do not overwhelm the national interest.

74 In the Lower House, the 300 seats are currently allocated according to a formula. Each prefecture gets one seat to start, and the remaining 253 are allocated according to population. Thus, even the smallest prefecture gets two seats. This formula is the reason for the deviation from one-person-one-vote in the Lower House. On 23 March 2011, the Supreme Court ruled this formula to be unconstitutional, and the Diet faces the requirement to change to a formula based solely on population. In the Upper House, there is a single, nationwide district for 96 seats – which obviously have no issue with election district in equalities. However, the remaining 146 seats are allocated among the prefectures, with each prefecture getting a minimum of two seats; the remaining 52 are allocated roughly according to population. The deviation from one-person-one-vote in the Upper House, therefore, is far greater than in the Lower House. In recent court cases challenging the Upper House system, all 15 of the regional High Courts have ruled that the current Upper House system is unconstitutional. The Supreme Court has yet to rule on the most recent cases.

75 The relevant articles of the Constitution are: Article 43 (2): 'The number of the members of each House shall be fixed by law.' Article 46: 'The term of office of members of the House of Councillors shall be six years, and election for half the members shall take place every three years'; Article 47: 'Electoral districts, method of voting and other matters pertaining to the method of election of members of both Houses shall be fixed by law.'

At the prefectural and city level, the easiest way to reduce seats would be a reduction in the number of local governments. This could occur by further reduction in the number of municipalities, and/or by reducing the number of levels of government. A reduction in the number of levels of government would also facilitate a long-sought goal, decentralisation of government. With a shift from 47 prefectures to a small number (most proposals vary between 9 and 13) of states, it would be easier to divide tasks and easier to develop e-government applications.

Some other reforms in the voting system might help. For example, young voters in Japan have even lower turnout ratios than those in other industrial countries. Hence, a system, such as that in Australia, that obligates voters to vote, might generate more representative outcomes. Such a system would also reduce the power of parties with well-organised support groups, which tend to gain votes by ensuring that their own votes show up. Alternatively, one might prohibit any group with ties to a political party from facilitating voter turnout.

There are also two older ideas that should be revived. First, the budget-screening exercise of 2009–10 should be revived, in order to keep the pressure of public scrutiny on spending items. Ex post scrutiny, with sanctions, must also increase, in order to strengthen incentives for achieving goals within budget limits. First, the budget-screening exercise of 2009–10 should be revived. The initial exercise (see detailed discussion above) was only partially successful, in light of the small level of spending actually cut. However, budget screening sessions attracted intense attention, and changed the incentives for both politicians and bureaucrats; the fear of public scrutiny is a powerful motivator. There are also a number of accounting improvements that would improve public scrutiny. Examples include shift of public sector accounting to private sector principles and concepts, and shortening of the lags between the end of a fiscal accounting period and availability of accounts.

Finally, there needs to be much more top-down discipline in setting budget content and execution. The quickest approach would be to revive the Council on Economic and Fiscal Policy (CEFP). This council, which has legal power to set budget priorities, began with the government administrative reforms under PM Hashimoto, and was used very effectively by PM Koizumi. The current government, however, abandoned use of the CEFP, preferring to seek a 'National Strategy Council' (NSC), with a broader mandate and with powers of mandatory enforcement over line-ministries. The latter proposal never passed the Diet, but the CEFP has not been revived. Hence, the government is relying on ad hoc committees for coordination. The consequence has been a major loss of ability to coordinate. An NSC may be better in concept than the CEFP, but the lack of either has been debilitating.

In formation of a policy-oversight council, such as the CEFP or an NSC, it is important for there to be private sector representatives, appointed by the PM, in order to create some distance between the debate in the council and political distortions. Such a group could implement the recommendations of a fiscal council, or even act itself as such a council.

6.6 Pro-growth policies

Our second basic principle for sustainable fiscal consolidation, recall, is that sustainable initiatives must be pro-growth. We consider the agenda for the US, Europe and Japan in this light.

6.6.1 The United States

Between 1979 and 2007, US real GDP per capita increased by 67%, a reasonably healthy 1.9% annual rate. The US growth rate over this period compares favourably to the growth rate of large continental European countries such as France, Germany and Italy and was similar to high growth countries such as the UK, the Netherlands, Finland and Sweden. The US economy has greater product market competition and more flexible labour markets than most European economies, which may be part of the explanation for the relatively high growth rates (Aghion and Howitt, 2006).

Looking forward, the US faces four challenges in sustaining high rates of growth. First, if the current high unemployment rates are allowed to persist for an extended period of time, potential GDP may be permanently lowered, as the human capital of jobless individuals depreciates. Okun's law implies that in order to bring the unemployment rate down by one percentage point, GDP must grow 2% above trend for a year. With US trend growth of about 2.5%, the economy needs to grow at 4.5% for 2 years to bring the unemployment rate, currently above 9%, down below 7%. But with US policymakers paralysed by fear of deficits, it is unlikely that the fiscal stimulus necessary to bring unemployment down will be enacted. Growth will likely suffer.

Second, spending cuts may reduce growth-enhancing government investments. It is clear that the US fiscal imbalance is going to lead to a reduction in government spending. So far, cuts are planned for discretionary programmes, but not for social insurance programmes. This pattern, along with the anti-tax climate, raises the risk that the country will forego growth enhancing public investments in research and development, infrastructure, and education in order to continue to sustain retiree benefit levels and low tax rates.

Third, growth rates may be limited if the country's human capital policies fail to improve. Until the 1980s, the US led the world in college completion rates. The US is now 12th as its rate has levelled off while that of other countries has continued to climb. While college enrolment continues to grow, many who enrol in college in the US fail to complete their studies. Moreover, many of the fastest growing demographic groups are ones who have traditionally had low college completion rates, adding to the challenge of increasing these rates over time. There are also concerns that the large US financial sector attracts too much of the country's top talent, diverting individuals from careers where they might otherwise have made technological innovations that raise living standards. Finally, starting in the 1960s, the US switched to a family unification based immigration policy that has increased the share of immigrants who have low education levels.

Fourth, increasing income inequality could threaten future growth rates. While US national income has grown rapidly over the past three decades, most Americans did not experience a growth in their standard of living nearly as large as the aggregate increase. The reason for this is that incomes in the US have become much more concentrated at the top. For example, the share of income accruing to the top 1% of taxpayers increased from 8% to 18% over this time period (Piketty and Saez, 2003). For a country like the US that is at the technological frontier, future growth rates will depend heavily on the amount of technological innovation that it produces. Recent growth theories suggest that because of imperfect capital markets, rising inequality can hinder innovation (Aghion *et al*, 1999). In particular, if low and middle income individuals have high-return investment opportunities but lack the resources to make investments, then the economy will lose the ability to benefit from those investment opportunities. If these theories are correct, US growth rates may lag.

6.6.2 Europe

Growth has been slow in most eurozone countries. Corrected for purchasing power, GDP per capita in the most advanced economies has been 10–25% below the US level over the last decades. The gap has not been closed; if anything it tended to increase before the crisis. Closing that gap can be a source of higher growth for a number of years.

Part of the problem comes from fewer hours worked on average per person. Shorter work weeks and longer paid vacations explain part of the difference, as does lower female labour participation in some – but not all – European countries. These features reflect social preferences, which are unlikely to change any time soon, except perhaps for female participation. Another part of the explanation is early retirement, which as explained in Chapter 4 is also likely to put national budgets under threat as the result of population ageing. Delaying retirement, as some countries have already done, therefore carries a double bonus: better public finances and faster growth. This would improve both the numerator and the denominator of the debt-to-GDP ratio in countries where reforms have been insufficient or inadequate.

Yet, another solution is to give older people the choice of how long they wish to participate in the work force. This should include possibilities to earn incomes that supplement pensions and the design of career paths allowing people to keep working while reducing the physical and stress burdens of their jobs.

The lower productivity of European countries is also explained by a maze of market-unfriendly regulation, both in labour markets and in product markets, and in many cases, by large, relatively low-productivity public sectors. These aspects, which again vastly vary in scope and nature across countries, are one aspect of the common pool problem emphasised in Chapter 2. When many groups are protected in various ways, and each exacts costs on all others, reforms are politically difficult, especially given that these groups add up to a majority of the population. Scaling down these inefficiencies may prove even more difficult than adopting fiscal rules and institutions.

It follows that spending ceilings may be a useful complement to debt and deficit rules in European countries. If these ceilings imply a reduction of the share of GDP devoted to public spending, over time they may force governments to make hard choices. The familiar risk, however, is that the spending ceilings may be jettisoned when a plurality of interest groups feel threatened.

In addition, growth could be boosted in practice by tax systems and personal bankruptcy regulations designed to encourage rather than discourage risk taking. Governments should not try to subsidise research and development in specific areas, given that the public sector has no comparative advantage in identifying which areas promise success and which do not. But tax systems can be designed to assume a portion of the extraordinary income risk faced by entrepreneurs and in that way to help to foster a growth-friendly environment.

Modern economic growth is based on the development of new and better products and technologies rather than on making ever more of the same old stuff. Innovation requires risk taking. The willingness to take risk being a matter of preference, part of the explanation for why the United States has been more innovative than Europe may be greater risk aversion of Europeans. While there may be something to this point, the capacity to take risk is equally important. US financial markets have provided financing for innovative activities to a much larger extent than their European counterparts. Improving the ability of European financial markets to provide venture capital and other forms of financing for start-ups and the development of new products and technologies would improve growth in Europe.

6.6.3 Japan

Fiscal reconstruction in Japan cannot be viewed as simply a matter of cutting spending or raising taxes. Rather, the entire set of issues surrounding economic growth is involved. Put bluntly, the best way to lower the debt/GDP ratio is by raising the denominator. This can be accomplished most effectively by policies to raise productivity and end deflation. Both spending and taxation policies should also be oriented toward these goals. Moreover, public sector workers, both politicians and bureaucrats, need to be given incentives that make adoption of rational fiscal policy consistent with self-interest.

That said, a key category of reforms applies to spending and taxation. These reforms cover healthcare and pensions, along with focusing incentives in the tax system toward growth. In healthcare, a binding budget constraint on spending is needed, especially in light of the sharp increase of the elderly over the next decade. It would be effective to set an upper limit of taxation to support healthcare (eg as a share of GDP). Healthcare spending would be funded within this limit, with no further fiscal resources. Should the funding prove inadequate at a given level of spending, then a national vote on raising the taxation limit would be triggered. In order to offset the bias toward spending that emanates from the common pool problem, a supermajority should be required to authorise higher taxes. In the case of a national referendum, the required supermajority should be set inversely proportional to the share of the elderly in the population – thus guaranteeing

that the young also support the tax hike. In the case of a national Diet vote, the supermajority needed would have to be large enough to offset the spending bias in the electoral system. Quite importantly, any revisions to the system should also require a supermajority.

Another key aspect in healthcare is the need to apply IT more effectively. The first application would be a nationwide system of electronic medical records, with a unified disease classification system, for use in deciding which treatments to be covered by national health insurance. Hospitals and clinics not using this system would not be eligible for payments by the national healthcare system. In addition, a unified billing and payments system could greatly reduce administrative costs.

In the area of pensions, a hard budget constraint would also be helpful. This will become more important, because the increased share of the elderly in the population increases the spending bias arising from the common pool problem. As with healthcare spending, a fixed percentage of GDP could be established as an upper limit of taxes dedicated to support of the pension system. Should this amount prove inadequate, a supermajority would be required to raise tax revenue for pensions; otherwise, pension payments would have to be cut.

A number of improvements to pension fairness would also increase economic efficiency. First, the retirement age should be indexed to aggregate longevity. Moreover, the pension system should enhance incentives for older workers to remain in the workforce. (Labour market rules to allow more wage flexibility and job change also could contribute to easing the pension problem.) In addition, there should be means testing for national pensions. The transparency of pension contributions and payouts also needs improvement, so that pensions become actuarially fair. Finally, the cost-of-living adjustment system needs to offset both inflation and deflation, with a price index tied to national productivity (eg the GDP deflator), not the consumer price index. A one-time, downward correction of pensions for past deflation would also be advisable.

Tax reform should be oriented toward enhancing productivity growth. This means encouraging work and risk-taking. The corporate income tax cut should be cut to levels that make Japan competitive with other nations, for example to about 20% (from the current 40%). Double taxation of dividends should be ended, and capital gains taxes should be abolished. In contrast, inheritance taxes should be restructured to encourage spending prior to the end of life. (Excess medical costs might also be recovered from remaining assets.) Marginal income tax rates should also be lowered, to encourage labour supply and skill-acquisition. These changes would be paid for by expansion of non-distortionary taxes, such as the consumption tax, along with some contribution from higher taxes on alcohol and tobacco. In addition, in order to induce competition among local governments, some local autonomy should be granted for income, property and consumption taxes – provided that central government transfers to local governments were adjusted accordingly. Finally, a national taxpayer ID number should be introduced immediately, in order to enhance honesty, fairness and efficiency.

Consider next the problem of population ageing. As society ages, the labour participation rate inevitably falls; hence, raising productivity is the only way to

maintain the standard of living.⁷⁶ There are a number of ways to raise productivity, but the most important is advancement of science and technology. Both energy policy (in view of the nuclear power problems after the Fukushima accident) and bio-tech (in view of medical needs of an ageing population) will be crucial. Increasing the number of scientists who can fill the need for increased R&D will be the key challenge for the educational system, along with deregulation that focuses applied science to commercial activities. Better communication with foreign scientific communities is crucial as well, and hence the recommendation for increased foreign study requirements in universities, increased scientific exchanges, and expanded e-education.

The second macro subcategory is monetary policy. The extreme independence of the Bank of Japan from political and policy debate has been a key determinant of the slow and grudging response to deflation, a more focused approach to inflation targeting could play a key role in Japan. However, the institutional framework needs to change. Already, the BoJ has its own soft inflation target (called 'an understanding of price stability') of 0–2% for the overall consumer price index. However, this target has no teeth. Deviations from the target entail no consequences for the BoJ or the government. Moreover, the well-known distortions in the CPI are ignored. Thus, as a way to improve nominal GDP growth and to improve tax revenue, there should be a shift toward government-imposed inflation target of 1–3% for the GDP deflator. Should this target be missed, the Diet should have the option to replace the management of the BoJ and the Monetary Policy Board.

The microeconomic side of the Japanese economy would benefit from a number of structural reforms, and thus could aid growth of tax revenue. Agricultural reforms could increase land usage and promote more exports of farm products. Several corporate governance reforms could help reallocate capital. A requirement for independent outside directors and limits on equity cross-holdings are two important ones. In addition, stockholders need to take their responsibilities more seriously – those who fail to vote their shares should be subject to dividend reductions. In the tax area, M&A has been discouraged by the need to revalue assets and pay capital gains taxes; deferral of taxation on merger activity could enhance capital and labour-use efficiency.

In labour markets, both mobility and the incentive to acquire new skills have been hampered by the legal vestiges of the life-time employment system. The status difference between regular workers and irregular workers should be abolished. There needs to be clarity on severance pay rules, along with links of executive compensation to corporate performance indicators, such as RoA, RoE and employment. Both immigration policy and family support policies (eg daycare, nursing care) need to encourage more labour market entry.

Enhancements in the area of public works spending are also needed. For example, air-rail links at major airports are poor, especially compared to Asian competitor hubs. A major restructuring of the airport system is also needed.

⁷⁶ Consider the equation: $Y/P = (Y/L)*(L/P)$, where Y is output, P is population, and L is labour. The equation has a key implication: In the face of ageing, which lowers L/P , the only way to maintain the standard of living (Y/P) is to raise productivity (Y/L).

Concerning procedures, the selection of projects must be systematically based on transparent criteria, such as RoI, along with much-improved disclosure and double-checking of RoI forecasts. Revival of the budget-screening process would enhance such process improvements.

6.7 Conclusion

Recent discussions of debt sustainability and fiscal consolidation have been motivated by a sense of crisis: do something, anything, to put public debts back on a sustainable footing because the markets are impatient and time is short. While not denying the need for immediate measures to address immediate problems, we have taken a step back in this report and consciously attempted to view the public debt situation from a longer-term perspective. Even if the immediate fiscal challenges confronting the advanced countries are successfully addressed, further challenges will emerge in the future as populations age and interest rates rise back toward more normal levels. Rather than remaining permanently in crisis-management mode, there is value, we would argue, to stepping back from current events and asking what should be done in terms of creating a broader environment conducive to ensuring that public debts remain on a sustainable footing.

We have argued that efforts along these lines should emphasise two objectives: strengthening institutional arrangements useful for solving the common pool problem intrinsic to decision making in the public sector, and sustaining economic growth so as to work on the denominator of the debt/GDP ratio. In doing so, it is important to acknowledge that one-size-fits-all advice is not useful. Institutional reforms appropriate for countries with proportional representation electoral systems, large electoral districts, and a high degree of electoral competition that tend to result in coalition governments are unlikely to work in countries with first-past-the-post electoral systems and small district magnitudes conducive to majoritarian governments. Institutions that work well in countries with parliamentary systems are unlikely to be effective in countries with presidential systems. Arrangements that work where party discipline is strong are unlikely to work where it is weak.

Similarly, consolidation strategies that emphasise cutting spending are obviously appropriate where current spending is dangerously high but less obviously so where the problem is on the revenue and entitlement sides and where spending cuts will fall disproportionately on programmes, including support for research and development, education and infrastructure, that shape the economy's ability to grow. This is a reminder that the two tasks – strengthening the institutional arrangements through which fiscal policy is made and more effectively fostering economic growth – affect one another. Ideally, policymakers will be aware of this interdependence and pursue their two objectives in a consistent way.

Appendix: Examples of successful and unsuccessful institutions

Successful institutions

*The Netherlands*⁷⁷

Perhaps the clearer example of an effective and well-adapted framework can be found in the Netherlands. For a long time, the deficit bias has been present in this country. Following the adoption of a new framework in the early 1990s, the public debt, long higher than the average of the rest of the eurozone countries, started to decline, as shown in Figure 6.1. Even the uptick during the economic and financial crisis cannot be interpreted as a relapse into fiscal indiscipline; it mostly reflects the need to recapitalise a couple of large banks that failed during the subprime crisis.

The Dutch contracting process fully reflects the nature of Dutch politics and involves both rules and an original institution, the Central Planning Bureau (CPB).⁷⁸ Proportional representation in a parliamentary system means that government is always a coalition of parties. The proper response is the contract approach. The Dutch arrangement effectively promotes explicit and transparent contracts. It all starts during the election. Competing political parties provide the CPB with their economic programmes, which allows the Bureau to evaluate their budgetary implications. These impartial and highly visible evaluations force the political parties to be careful with their electoral promises, an important step to contain the common pool problem.

Following the elections, the winning coalition works out an explicit fiscal policy contract that is binding until the next election. The CPB provides estimates of the budget over the duration of the legislature, based on its own macroeconomic forecasts. This document becomes the harbinger of fiscal policy. A key element is the required adoption of medium-term spending ceilings, for each ministry. There is no standard – and arbitrary – mandatory number but, given that governments always involve several parties, the practice has a clear moderating impact. There is a little bit of flexibility (1%) for shifting spending from one year to the next but ‘growth bonuses’ are not usable later. Taxes become the main macroeconomic instrument, under the scrutiny of the CPB, which evaluates debt sustainability. The resulting tendency for procyclical policies is of limited importance for a small and very open economy.

The CPB is also involved in the annual budgetary cycles. The Finance Ministry relies on the Bureau to evaluate each budget early at the preparation stage and when the budget is finalised. This removes the possibility for the government to use overly optimistic macroeconomic forecasts and costing calculations.

⁷⁷ A detailed description can be found in Bos (2007).

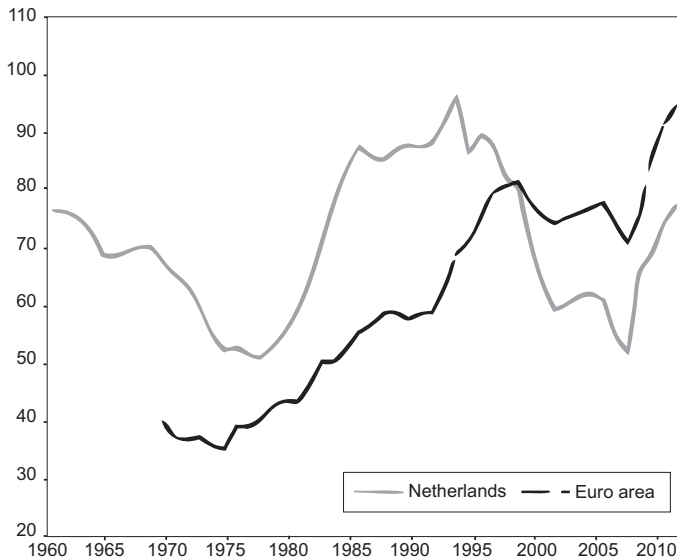
⁷⁸ As its formal name suggests, the CPB was created in the early postwar period (it now calls itself Bureau of Economic Analysis but retains its acronym CPB). It was initially designed to work on economic planning at a time of scarcity. Its first Director, Nobel Prize laureate Jan Tinbergen, gave the CPB prominence and credibility. Although it is formally part of the Ministry of Economic Affairs, the CPB enjoys *de facto* independence, partly because of its various supervisory boards, and partly because of its history and positioning in Dutch society.

Switzerland

As the relentless increase in public indebtedness throughout the 1990s indicates, Switzerland too was suffering from a deficit bias. This led to the adoption in 2000 of a constitutional fiscal rule that came into effect in 2003.⁷⁹ Figure 6.2 shows that the rule has resulted in a sharp reversal of the debt trend. This reversal is particularly spectacular as it has continued throughout the crisis.

The debt brake is a rule, which requires that the overall federal budget be balanced over the cycle. To that effect, any budget imbalance, whether positive or negative, is credited into a control account. If the cumulated amount is negative, it must be brought to balance ‘over the next few years’. No requirement applies when the cumulated amount is positive. This clever arrangement implies that, over time and at the government’s discretion, deficits must be compensated for

Figure 6.1 Public debts in The Netherlands and the Euro area (% of GDP)



Source: AMECO, European Commission

by surpluses. The stipulation is flexible enough not to put the government in a pro-cyclical straightjacket. It could lead to prolonged slippages, though, but this is unlikely in a country committed to the rule of law. During the crisis, the debt brake figured prominently in policy debates and quite clearly shaped the policy response. As in the Netherlands, procyclical policies may carry limited importance given the relatively small size and large openness of the Swiss economy.

Any binding rule stands to become harmful in special unforeseen circumstances. This is why the debt brake includes an escape clause. In case of exceptional circumstances (deep recession, natural disasters and the like) the implied spending ceiling can be raised but this requires a qualified majority

⁷⁹ The constitutional rule adopted by Germany in 2009, which is due to be fully implemented in 2016, is closely patterned after the Swiss ‘debt brake’.

(three-fifths) in both chambers. An amendment stipulates that any such slippage must be added to the control account and therefore compensated by surpluses once the situation returns to normal.

The success of the Swiss debt brake (so far) derives from the simplicity and flexibility of the rule. It has not been severely tested yet, however. In particular, it remains to be seen what would happen should a negative balance in the control account not be corrected 'over the next few years'. Presumably, the case could be sent to the Higher Court.

Unsuccessful institutions (so far)

The UK: Old and new institutions

Following the election of the Tony Blair government, the Chancellor of the Exchequer, Gordon Brown, adopted the Code for Fiscal Stability. The Code was consulted on and then formally established through the Finance Act 1998, it set out a new fiscal policy framework aimed at promoting a 'commonsense and accountable approach to managing the public finances in the long-term interests of Britain'. The Code pledged transparency, stability, responsibility, fairness and efficiency in the setting of fiscal policy and the management of public finances.

Although it was not set formally in legislation or the Code, Gordon Brown stipulated a 'golden rule' to which UK fiscal policy would adhere; requiring that the current budget be balanced over the business cycle. He also implemented the 'sustainable investment rule', that public sector net debt would be maintained at a prudent level (which came to be 40% of GDP). The UK Treasury (and the Chancellor of the Exchequer himself) retained responsibility for the economic and public finances forecast against which achievement of its fiscal rules were judged. Furthermore, there was no enforcement mechanism in the event that rules were breached and the Chancellor retained discretion to change the fiscal rules at each Budget, should he wish to do so.

Figure 6.3 suggests that the Code was not flawless. The budget improved considerably after 1998 as the Blair government adhered to inherited spending plans. But the budget deficit worsened from 2001–2 as Chancellor Brown began increasing public expenditure, particularly on health. The budget remained in negative territory, with the UK running a structural deficit, until the plunge provoked (and justified) by the financial crisis.

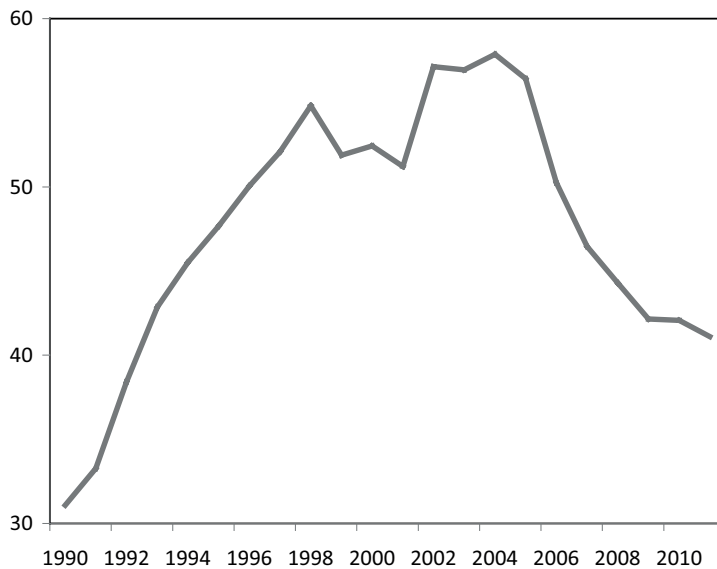
According to Table 6.1, the UK is a delegation country. Strengthening the hand of the finance minister is therefore a well-adapted solution to the deficit bias.⁸⁰ The Code illustrates our view that fiscal discipline needs to rely upon either formal numerical rules, or powerful fiscal procedures – hopefully involving an independent council – or preferably both. The Code for Fiscal Stability included none of these crucial elements.

Soon after the election in 2010 of the Cameron government, the Chancellor, George Osborne, created the independent Office for Budget Responsibility (OBR). The main duty of the OBR, set out in primary legislation in the Budget

⁸⁰ Over the 33 years from 1960 to 1999, the British budget has been in deficit for 33 years, with relatively small surpluses and on average larger deficits.

Responsibility and National Audit Act 2011, is ‘to examine and report on the sustainability of the public finances’. The OBR produces the UK’s official economic and fiscal forecast on which the government sets policy. These forecasts are produced by the OBR itself independently of the government. The OBR is also given an official watchdog role. In particular, it formally assesses the government’s progress against its own announced fiscal targets (of a cyclically adjusted budget surplus and a declining debt to GDP ratio by the end of the five-year forecast horizon).

Figure 6.2 Public debt in Switzerland (% of GDP)



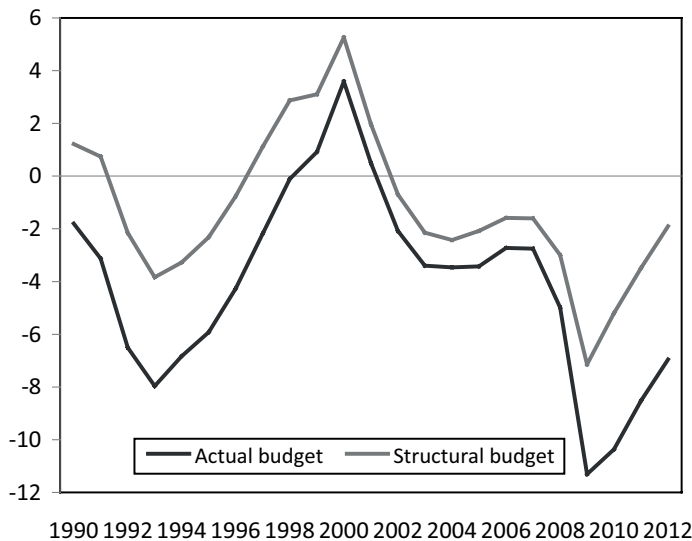
Source: Economic Outlook, OECD

The new institution again matches the delegation nature of the British political system, but is a historic break with the past and increases independence, credibility and transparency. The OBR is embedded in primary legislation and has a formal Memorandum of Understanding with the UK Treasury and other government departments to govern working relationships and the OBR’s full access to government data and forecasting resources. Furthermore, to support the OBR’s independence, the OBR is located away from the UK Treasury, and staff that were initially seconded to the OBR from the Treasury have now been transferred permanently and answer only to the Chairman of the OBR, Robert Chote.

The UK’s fiscal rules are now required by primary legislation and set out formally in the Charter for Budget Responsibility (the successor document to the old Code). Furthermore, the government has to amend the Charter – which requires a majority vote in Parliament – in order to change its fiscal rules.

With the passage of primary legislation, the creation of the OBR and the new Charter, the UK's fiscal policy framework has been improved but still has some weaknesses. There is still the absence of an enforcement mechanism for the government's fiscal rules. Although the Chancellor is now required to explain to Parliament if the OBR judges that the government is no longer on course to meet its rules, there is no automatic adjustment mechanism and the Chancellor may rather change the rules than adjust fiscal policy. It remains early days for the UK's new fiscal framework.

Figure 6.3 Budget deficit in the UK (% of GDP)



Source: AMECO, European Commission.

The new institution again matches the delegation nature of the British political system. Indeed, like the Dutch CPB, the OBR is embedded into the UK Treasury, so that its role is to reinforce the credibility of the work that is conducted there. Still, it has weaknesses. It depends entirely on the Treasury for data and for much of its analytical work. While its Board includes individuals with impeccable credentials, it lacks the independent staff and resources that provide true independence. In addition, there still is no formal numerical rule. While the government now has to state publicly and formally its medium targets, the targets can be changed or 'adjusted' when circumstances change. Both shortcomings could be alleviated by a practice seen as truly independent in the OBR's early years, following classic British-style common law tradition, but this remains to be seen. Surely, more independence and formal rules could be added.

France

The last year when the French budget was balanced was 1974. The public debt has been increasing relative to GDP ever since. Public opinion has never attached great attention to the lack of discipline of its various governments, focusing instead on the classic common pool practice of requesting more public spending

and more transfers while disapproving of tax increases. ‘Austerity’ is a word that guarantees electoral loss.

Policymakers have long been aware that the public debt has not been stabilised. Numerous commissions have been appointed and each has produced reports confirming the lack of discipline and making proposals for reform. As a result, a number of steps have been taken to constrain the budget preparation process. But these steps have not gone as far as establishing a rule or an independent watchdog. France has a mixed presidential-parliamentarian regime: it is presidential when the presidency and the Assembly (the lower chamber) are controlled by the same party, it is parliamentary in the opposite case. The majority is always dominated by a single party, which suggests that France is a delegation country. Indeed, the finance minister has large agenda-setting power, but this power is shared with the president or parliament according to the prevailing regime.

Two arrangements, the LOLF (*Loi Organique des Lois de Finance*) and the RGPP (*Revision Générale des Politiques Publiques*), entered into force in 2006 and 2007, respectively. Their objective, however, is less fiscal discipline than effectiveness of public spending. Importantly, the LOLF brings together a series of disparate budgets – mainly state and welfare – that used to be treated separately. Indeed, until then, these budgets were treated completely separately, with the result that deficits were cumulated without policymakers being forced to take a view of the aggregate public deficits. It still is the case that the Parliament votes on two legally distinct budgets (central government and welfare) but the LOLF requires that the overall budget be explicitly acknowledged.

In 2008, a constitutional amendment established the requirement that the overall budget be brought to balance. This has led to three-year budget programmes (*Loi de Programmation des Finances Publiques*, LPFP), which are required to display a path toward balance. The procedure also requires the finance minister to set ceilings for annual spending and floors for planned annual tax revenues, and the Parliament cannot override the government.

In practice, however, the government can appeal informally to special circumstances and deviate from the pre-specified path. In addition, numerous loopholes exist and they are being actively exploited.⁸¹ The first implementation of the LPFP is a case in point. Figure 6.4 shows the evolution of the debt as specified by the law adopted in 2008 for the three-year period 2009–11. Noting the high level of uncertainty created by the crisis, the government remained very cautious and merely aimed at stabilising the debt to GDP ratio. Even so, the actual implementation led to a 17 percentage point increase in the ratio.

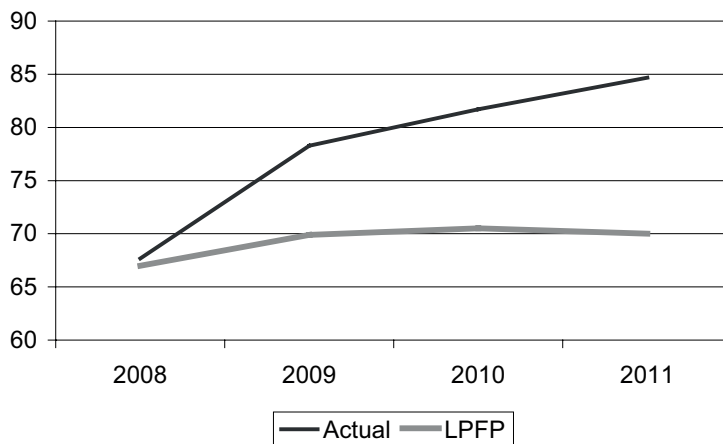
In practice, the LPFP failed to affect even the public debate, which merely paid lip service to the constitutional request. There are good reasons for that. First, the law requires a three-year path toward equilibrium but sets no horizon for achieving it. Second, the Higher Court (*Cours Constitutionnelle*), which theoretically could censure the government, has a history of considering the budget as an instrument rather than the object of any legal commitment. Third, while such departures must in principle be corrected ‘over the next few years’, the

81 As in many countries, ‘tax expenditures’ – tax advantages offered to specific interest groups – have increased considerably.

horizon is not specified. Fourth, the LPFP concerns the budget law, not the budget execution. The relevant court (Cours des Comptes) publishes a report several months after the annual budget has been closed, letting all bygones be bygones. Fifth, various budgetary laws accumulated over the years have created a maze of rules so opaque that only few people – budget policy insiders – understand them. This strengthens the common pool problem. Finally, the finance minister could use its power to constrain the process but, historically, it has never stood up to the president and to the parliament.

In conclusion, the constitutional budget requirement is a statement of intention with no rule, no binding constraint, and no enforcement mechanism. The existing watchdogs are courts with limited economic expertise and a long tradition of avoiding any confrontation with the government on macroeconomic matters.

Figure 6.4 Gross public debt in France (% of GDP)



Source: Ministère du Budget, France and AMECO, European Commission

Discussion

Presentation of the country chapters

Ted Truman, *Peterson Institute of International Economics, Washington*

Ted Truman started by noting the importance of the topic and by stating that he particularly appreciated the Geneva Report's wealth of information, the combination of a retrospective look into the causes of the current state of the world and the forward-looking projections, the focus on institutions and the associated political economy issues, and the discussion of particularities of each country. He shared the view of the authors that the 90% debt/GDP threshold that is believed to be critical for debt distress is too simplistic and added that the three cases presented face different degrees of urgency. He also referred to a recent IMF study on ageing.

He was not convinced that the common pool hypothesis was at the key explanation of why democracies generate excessive debt levels. The common pool hypothesis can explain decisions made at the margin, while most of the tax and expenditure decisions are intra-marginal. Also, the common-pool framework leaves out the role of fiscal policy in macroeconomic stabilisation and the associated decision-making process. Observing that economists' opinions on the issue remain divided, he wondered how this framework performs historically.

On the issue of urgency, he argued that one should not focus solely on the demographic time bombs, but also on policies, in particular monetary, regulatory and structural policies. He observed that international interactions matter, in particular the potential advantages or disadvantages of moving first or last. Also, he stressed the potential relevance of countries outside the G3 for the analysis, for example their investment and savings rates.

Commenting on the US case, he appreciated the historical dimension and agreed with the basic message that a solution will be eventually found but that there is considerable uncertainty about the choice of policy instruments and about timing. Yet, there is a scope for a balanced approach that would target both revenues and expenditures. He also believed that some institutional innovations are needed but thought that markets are not fooled by the current weaknesses such as the temporary programmes. Regarding timing, he reminded the audience that the last fiscal consolidation in the US took a decade to accomplish. This suggests that it makes sense to wait until after the 2012 presidential election so that it can be fought over fiscal issues.

On the other cases, Ted Truman expressed doubts about fiscal dominance in Europe. He next wondered whether Japan is more or less exposed to a debt crisis than other countries. The conventional argument is that the Japanese are less exposed because they owe their debt to themselves. However, he saw a tension there between people who repay the debt and those that are on the receiving end. Similarly, he was not convinced of disproportional benefits for seniors. In his view, the payments to seniors are a part of a social contract and the seniors think that they paid for their benefits in advance. In that respect, it would be useful to know exactly how much they contributed to the system and how it compares to the promised benefits.

Benoit Coeuré, *Ministère de l'Economie et des Finances, Paris*

Focused on the EU, Benoit Coeuré praised the framework adopted by the Geneva Report and acknowledged the importance of focusing on institutions and implementation. He distinguished two types of issues: How did we get into the present situation and the associated threats? And how do we move back to a sustainable path, and what is needed to succeed in that effort?

Agreeing that public finances in the Eurozone are in an unpleasant situation, he observed that the latest data reveals that the deficits in many countries decreased much more quickly than had been expected. Concerning the 'business-as-usual' scenarios presented in the report, he thought that the exercise was a little bit too forward-looking. More effort must be devoted to detect persistence in fiscal patterns because it is difficult to change the way governments are working, especially in large countries. Resistance to change comes from entrenched social preferences, bureaucratic habits, rent-seeking etc. For example, in France the high level of debt before the crisis was not caused by ageing but by increases in social transfers. As a result, if one wants to foresee how current trends can be reversed in the future, it is important to understand why high growth of social spending has been supported in the past. There are various potential explanations: the need to compensate the losers from globalisation, a call for more redistribution as a reaction to rising inequalities, or an increasingly fragmented society laying the ground for attrition wars and delayed fiscal adjustment.

More attention should also be paid to short-term developments beyond long-term trends such as ageing, he said, because the initial position is important, in particular the discrepancy between the cyclically adjusted and the debt-stabilising deficit. The most crucial task is to map the initial dynamics. To illustrate how this should be done, he referred the audience to the European Commission's S2 indicator (sustainability gap) that is composed of two parts: the initial dynamics and the long-term trends.

Benoit Coeuré next commented on institutions. He felt that the authors of the report underestimate the reforms of the European governance currently under way. He disagreed in particular on the presumed inefficiency of reforms of the Stability and Growth Pact (SGP) in strengthening enforcement at the national level. The package currently under discussion by the European Parliament contains a directive on minimal requirements on national fiscal frameworks. The package sets a common framework for fiscal policies in the Eurozone

countries with a path for debt-reduction, budget balance targets, and multiyear numerical rules for spending and tax levels. In addition to annual budgets that will be discussed by the national parliaments, a stability programme will be discussed at the European level. This framework is already implemented or under implementation in some countries. In his view, this new system is an important step as it brings more complementarities between national and EU rules, and it assures time-consistency by the introduction of compulsory multiyear planning.

He disagreed with the authors on the notion that growth will not solve the debt problem. He was sympathetic to the idea that growth should not be an excuse for a lack of fiscal efforts, but without raising the level of potential growth Europe cannot get on a sustainable path, no matter what type of fiscal rules will be implemented. So, according to Benoit Coeuré, there is also a need for pro-growth institutions, which is discussed neither in the report nor at the European level.

He felt that the issues of monetary policy dominance should be discussed more in the case of the USA than in the case of the Eurozone. First, the Eurozone is the only region where monetary dominance is established in the Constitution. Second, the security purchase programme implemented by the ECB is too limited to create a significant risk of inflation. Still, even though there is no risk to monetary dominance at the moment, he warned that fiscal dominance might creep in through the mandate given to the central bank on financial stability.

Benoit Coeuré concluded that there was a need to develop more further the consequences of a fiscal crisis to be able to better imagine what would happen if we do not do anything. He felt it was important to explain how disruptive sovereign defaults are, to warn against the risk of monetisation, and to highlight the threat of disappearance of safe financial assets. Fifteen years ago, people discussed what would happen if there was no public debt and the financial markets would have to live without safe assets. Now that there is too much public debt, we face uncertainty regarding the safety of some of these debts.

Kazumasa Iwata, Institute of Economic and Social Research, Tokyo

Kazumasa Iwata focused on the case of Japan. He highlighted intergenerational inequality in the social security system, which is unusually large given the otherwise relative small scale of government in Japan. Focusing on the proposed solution, he first dealt with the issue of productivity. The Japanese government produces two versions of medium-term fiscal projections, which differ by the assumptions they make regarding productivity growth. Even under the more optimistic assumptions, the primary budget is projected to be in deficit but the outcome is very sensitive to assumptions. A 1% difference in forecasted productivity growth over the next 10 years produces a 30% difference in the debt-to-GDP ratio. This means that if Japan succeeds in raising productivity growth by 1%, the fiscal benefits will be significant.

Turning to the Geneva Report's proposal to raise the consumption tax, Kazumasa Iwata presented projections by the Institute of Economic and Social Research. Assuming a 5% increase in consumption tax and 0.9% productivity growth (compared to the 1.9% optimistic scenario of the government), the primary budget still remains in deficit, mainly due to the negative impact of

the consumption tax on output. He also noted that the consumption tax would generate only a one-time increase in consumer prices; therefore it would not help with ending deflation. He suggested a different way to both end deflation and decrease the intergenerational inequality: introduce a tax-financed basic public pension system along with a funded scheme as a second pillar.

He added that in theory, fiscal policy can substitute for monetary policy, for example by enacting an interest rate tax credit, which is equivalent to decreasing the interest rate. In order to shift the tax burden away from labour and toward consumption, one can combine consumption tax increases together with wage tax reductions.

David Ramsden, *HM Treasury, London*

David Ramsden focused on the UK, drawing on his experience on crisis response and consolidation. As a fiscal policymaker, he liked the institutional approach, which resonated well with the UK experience. The report correctly argues that there is no one-size-fits-all when it comes to stabilisation policies or institutional constructions. Unlike the authors, however, he was optimistic about the potential of supply-side policies to have a beneficial impact. He also thought that the report was too critical of quantification. He did not think that the rules of thumb, such as the 90% debt-GDP ratio, always apply but they can serve as a stabilisation objective. In addition, clear rules or rules of thumb help to focus the minds of policymakers, offering a reference for comparisons with previous historical episodes and with other countries. He also advocated the use of IMF data and especially the IMF Fiscal Sustainability Risk Map for Advanced Economies, in fact quite close to the Geneva Report's focus on policy implementation.

David Ramsden flagged three types of risks. First, he was concerned with the health of the financial sector. When the banking sector is large, the riskiness of banks' assets contributes significantly to sovereign risk. Indeed, in 2010 countries with large financial sectors tended to post large primary structural deficits. Second, demographics constitute a long-term challenge because of uncertainties in estimating the scope of the associated risks. For instance, estimates of future health care spending in the UK are very sensitive to assumptions about technological changes. In this kind of situation, he argued, an independent fiscal council can make a sizeable contribution in publishing reports on sustainability. The third risk concerns macroeconomic uncertainty. According to the IMF, a clear fiscal strategy can reduce uncertainty and hence support confidence. In order to deal with the tail risk of a very nasty fiscal outcome, the UK has already started fiscal consolidation. Although in the short term, the consolidation seems to have an adverse impact on growth, one has to consider the counterfactual. Here again fiscal councils would have a role to play in setting figures that can serve as a basis for decision making, for example by estimating cyclically adjusted budgets or by showing the cost of inflation for the public sector in order to mitigate fears of monetisation.

General Discussion

Jean Pisani-Ferry, *Director, Bruegel, Brussels*

Jean Pisani-Ferry wanted to distinguish some implicit assumptions that the report makes among countries. It assumes that, in the USA, the financial crisis had a major cyclical component while in Europe the shock was more structural and that the output is lost forever. Is that certain? Also, looking to the future by assuming that policy is constant can be misleading, when it is in fact unsustainable.

Akira Kohsaka, *Professor, School of International Studies, Kwansei Gakuin University, Hyogo*

Commenting on Japan, Akira Kohsaka felt that Chapter 5 overemphasised the lack of transparency in Japanese budget figures, while Japan is really not an exception. He also noted that decision rules that impose a medium-term constraint on policy cannot be easily changed. Finally, he agreed on the importance of ending deflation. Japan has gone through 10-year cycles of fiscal consolidation: in the 1980s, fiscal consolidation was successful in Japan, in contrast with most other OECD countries. Then, in the 1990s, the situation turned around and Japan's fiscal situation deteriorated significantly. In the 2000s Japan was again unsuccessful in consolidating its public finances. Hence, the lost decade turned out to stretch to two lost decades. Ending deflation should be taken as the top priority. Reacting to Kazumasa Iwata's proposed tax reforms, Akira Kohsaka suggested that easy money can also be a part of the solution, for example the Bank of Japan could purchase government bonds.

Alexander Swoboda, *Emeritus Professor of Economics, The Graduate Institute of International and Development Studies, Geneva*

Alexander Swoboda thought that, indeed, more should be said about the possibility of reducing the stock of debt through inflation. Even though in the case of Japan, this does not come naturally to mind because of persistent deflation, for the other two cases, the USA and the EU, this prospect should be more seriously discussed. This would raise serious questions of international coordination. Within the G20, for example, China has been reacting to the depreciation of the dollar. He also indicated that he remained unconvinced by the 'no-size-fits-all' view as too easy a criticism of some policies. For him, the real question is to find a general rule or policy that would be acceptable by individual countries.

Angel Ubide, *Director of Global Economics, Tudor Investment Corporation, Washington DC*

Angel Ubide wanted to hear more on why we should be worried by high public debts. The markets focus on countries with high levels of debt when accompanied by current account deficits. It is not just a question of the size of the debt, but who owns the debt and how it is financed matters. He claimed that if we cannot explain why Japan has not had a crisis already, we need not worry by debt increases in other countries.

Ignazio Visco, *Member of the Governing Board and Deputy Director General, Banca d'Italia, Roma*

Ignazio Visco agreed that more attention should be given to the differences in net foreign positions. He also mentioned the extreme home bias of Japanese investors, who hold 90% of the Japanese public debt. The question is how important is this fact and what would need to happen to change it, especially since most crises happen when people try to move capital abroad.

Robert Feldman, *Managing Director, Morgan Stanley, Tokyo*

Robert Feldman disagreed with Akira Kosaka who asserted that the lack of transparency of Japanese public accounts was in line with what can be found in other developed countries. At any rate, the lack of transparency in other countries should not be an excuse for Japan. He also took exception with the view that political institutions cannot be changed. This is simply a question of political will. On the other hand, he agreed on the need to end deflation.

Concerning the channels through which a more aggressive policy by the Bank of Japan might operate, he mentioned the foreign exchange rate, land prices and asset prices in general, as well as investment spending. He was amazed that there was no debate on the real interest rate: if the Bank of Japan succeeds in increasing inflation, the real interest rate will go down which would stimulate investment and productivity growth.

On the issue of inflating the debt away, he quoted Reinhart and Rogoff (2009): why do the young people not rise up, generate inflation and take the wealth from the old generation? In his view, inflation is politically the easiest (and probably fairest) way to reduce the public debt, since it is politically very hard to raise taxes or cut spending. He also indicated that he was sceptical about the fairness of the 'social contract' because it is in fact the currently old generation that voted on benefits that need to be paid by people that were not involved in the decision-making process. It was not society that made promises to the old generation, they made those promises to themselves.

Finally, he commented on the home bias question and on the prospects of a bond market crisis in Japan. He warned against mixing up stocks and flows. The stock view is that 90% of bonds are owned at home, largely because investing abroad is perceived to be dangerous. Looking at flows, however, he noted that savings are likely to diminish while investment will not decrease by as much, in part because of the earthquake. In the end, there will not be enough money to fund the larger deficits over time and the Bank of Japan will end up printing money. He also pointed out that there already were a couple of small crises that got contained in the end, for example in the autumn of 2009. If the debt increases further, it will get to a level where such tax revenues will not be sufficient to cover the interest payments.

Eric Chaney, *Chief Economist, AXA, Paris*

Eric Chaney picked up the issue of monetary dominance. In 1946 the US debt was 122% of GDP. Ten years later it was down at 60%. While many would say

that the debt decreased so rapidly because of high inflation, the real story is much more about strong GDP growth (4% GDP growth, 3.5% inflation). It is often said that high inflation will not be effective in resolving indebtedness unless it is a surprise. However, inflation will reduce the initial stock of debt because interest rates are fixed (at least in the USA). Hence, with a look at the fact that the Fed does not have an inflation target, the question is whether the USA could not try a different mix this time, for example 4% inflation and 3% GDP growth.

About Japan, Eric Chaney felt that market feedback is an important part of the story. Even though market discipline did not work in Europe, it might come back through some structural changes. In the case of the USA, he was sympathetic with the thesis that it was the imbalance between supply and demand of reserve assets that was responsible for low interest rates before the crisis. But now, China has decided to change policy and focus more on domestic demand. As a result, in the first quarter of 2011 China was running a current account deficit. This is an example of structural changes that can lead to higher interest rates and that would amplify the policy reaction.

All in all, market discipline is extremely useful. In the case of Europe, without a good crisis, there would be no reform of governance in the Eurozone. He suggested that it is also needed to talk about debt restructuring. This could awaken market discipline and send a shock wave not only through the Eurozone but also to other OECD countries such as the UK.

Amlan Roy, *Managing Director, Credit Suisse (Securities) Europe Limited*

Amlan Roy quoted his own projections showing that the current account in Japan will go negative much earlier because of adverse demographics. On the topic of transparency and implicit liabilities, he mentioned that the present value of deficit from US state pension plans not accounted for stands at \$5 trillion. The US government is allowing discounting future liabilities at the rate of 8% while none of the plans is making returns higher than 1%. Implicit liabilities in health programmes provide another example of huge implicit liabilities.

Richard Portes, *Professor of Economics, London Business School; President, CEPR, London*

Richard Portes disagreed with the framework of the report. In his view, there are two long-run fiscal issues: health care and pensions. The demographic problem needs to be solved by reforming the labour market. If the retirement age does not increase in line with life expectancy, then the living standards of the retired people have to fall relative to those who work. Alternatively, those who work have to make higher transfers to those who do not work. In this case, fiscal policy is irrelevant: the key is to make people work longer. The share of working people in the population determines the overall size of the intergenerational transfer. From this point of view, it is mainly a labour market problem, not a fiscal one.

Dino Kos, *Managing Director, Hamiltonian Associates Ltd., New York*

Dino Kos suggested looking at the example of Canada. In the early 1990s Canada was regarded as a hopeless case. Yet, thanks to tough decisions and with some luck

they managed to improve their fiscal situation. He also agreed that it is important not to overlook implicit liabilities. If focus is centred solely on the public debt, politicians will move everything out of the balance sheet. For example, in 1968 the Johnson administration privatised Fannie Mae exactly in order to get it off the public sector balance sheet.

Luigi Buttiglione, *Head of Global Strategy, Brevan Howard Investment Products Limited, Geneva*

According to Luigi Buttiglione, the Eurozone is facing a joint problem of competitiveness and debt stabilisation. The countries that want to regain competitiveness within the Eurozone need deflation. On the other hand, with debt stabilisation it is inflation that would help.

Thomas Jordan, *Vice Chairman of the Governing Board, Swiss National Bank, Bern*
Concerning the topic of fiscal versus monetary dominance, Thomas Jordan agreed that generating inflation was not a good idea. However, what matters is not what central bankers think but what politicians decide. Although at the moment we have monetary dominance, this should not be taken for granted. If debt levels keep increasing, the situation might change completely. Regarding fiscal stabilisation in the USA, he observed that it has been previously mentioned that the correction should come both from the spending and the tax side. Now, however, it is often asserted that the correction should come mainly from spending cuts because the US tax system is too distortionary.

Laurence Boone, *Chief Economist, Barclays Capital, Paris*

Laurence Boone asked how the Eurozone can grow with such a high level of debt. She also wondered what will happen if the adjustment strategy fails. Restructuring the Greek debt would be an example of such a failure and she was wondering how the Eurozone would deal with it.

Jacques Delpla, *Economist, Conseil d'analyse économique, Paris*

While the report emphasised the supply side of the public debt, Jacques Delpla felt that more attention should be paid to the demand side, that is, reactions of the market. Another important aspect to consider is that the fact that the European Stability Mechanism (ESM) will be a senior creditor will send an important signal to investors on what would happen in case of restructuring. This is why interest rates cannot be taken as fixed; they will play an even larger role in the future.

Jeffrey Liebman, *Professor of Public Policy, Harvard University, Cambridge, MA*

Jeffrey Liebman sought to explain pessimism about potential growth compared to past experience. While productivity growth is likely to be the same as in the past, the important factor that distinguished the current situation is that labour force growth is going to be slower because of the demographics. He also commented on the tax versus spending split of fiscal stabilisation. Currently, the USA is on a trajectory with increasing spending as a share of GDP. Some people see this as a proof of expanding government, while it is only a predictable effect

of the ageing of the society. As a consequence, there is no easy spending splurge that can be reversed; reducing spending would mean reducing entitlements of the old generation. It is politically feasible to cut pension spending or to stem the increase in health care costs, but that cannot be done earlier than in 3–5 years. Thus, if one is committed to acting fast, it is the revenues that must be increased. In the longer run, government spending depends on how much state-of-the-art health care the USA wants to consume. Most of the research suggests that the benefits of spending on health care still exceed the costs. This means that when cutting expenditures one would need to focus on low-value health care spending.

Charles Wyplosz, *Professor of International Economics, The Graduate Institute of International and Development Studies; Director, ICMB, Geneva*

Charles Wyplosz acknowledged that the report does not take into account the demand side of the government bond market. The reason is a conscious choice not to be driven by the debt crises, which is the object of much work elsewhere. He next indicated that he had serious doubts about the usefulness of debt sustainability measures. For example, the Portuguese debt was deemed sustainable 6 months ago, then it increased by a negligible amount and suddenly the markets decided it is not sustainable. Sustainability, he claimed, cannot be measured; instead it is driven by market sentiment.

On the topic of supply-side policies and growth, he noted that raising real GDP growth by 1% can make a huge difference. However, implementing supply-side policies is politically as difficult as dealing with budget deficits because generally they both affect the same groups of people.

On whether we should focus only on public debt in an environment when a part of the private debt can become public in a crisis, he observed that uncertainty about the size of this phenomenon is substantial. The risk is that people take seriously numbers based on arbitrary assumptions.

Finally, he pointed to the fact that the popular message from charts showing past trajectories of labour cost within the Eurozone assume that 1999 – the year when the euro was launched – was a year when real exchange rates were in equilibrium. Other normalisation assumptions provide a different impression. In addition, it is not necessarily true that competitiveness needs to be regained by deflation. In fact, the countries that have competitiveness problems are those with very little productivity growth in the past and, therefore, some growth potential in the future.

The Political Economy of Fiscal Consolidation (Chapter 2)

Stefan Gerlach, *Managing Director, Institute for Monetary and Financial Stability, House of Finance, Goethe University of Frankfurt*

Stefan Gerlach congratulated the authors on writing a clear and informative chapter that reviews the important lessons. He underlined the importance of fiscal rules and deficit-limiting restricting laws in general. Looking at the problem of increasing or continuously high deficits through the lens of the political

system and the game theory of politics is clearly appropriate. On the other hand, the question why fiscal rules are ineffective in some countries is not explicitly analysed. The main issue is that enforcement, which distorts the picture of effective fiscal rules, is simply inherent to certain forms of governance. He admitted that there might be a lack of counterfactuals to make a strong argument about enforcement.

Stefan Gerlach also agreed with the view that large deficits reflect structural problems, which, more often than not, stem directly from the way politics is institutionalised. He wondered whether there would also be a strong correlation between large deficits and alternative, more general indicators of government-like transparency or corruption. He has found such a strong correlation in his own research. He further suggested that history could yield further insight. Does a large debt in the past mean a large debt at present? Would the same approach allow the same conclusions in the context of the Gold Standard? Again, he was of the opinion that there is a strong correlation in both cases. In conclusion he said that the report does well to not try and answer the question of how to tax, but how to change the institutional framework.

Steven Cecchetti, *Economic Adviser, Bank for International Settlements*

Steven Cecchetti presented some of his own findings, based on the comparison of deficit and debt forecasts up to 2040 with different policies implemented along the way. The lessons from this work are reasonably reassuring. First, switching to forward-looking budgeting processes, including multiyear budgeting, can have an immediate and important impact. Second, poor communication and lack of transparency often cause problems. Facing the common pool problem, democratically elected government officials and representatives can improve the dialogue with voters to transparently present the effects of policies and laws that they stand for. Third, countries that have created important reserve funds have performed much better in balancing budgets in the long run and in reacting to crises (eg Chile). Fourth, in most countries there is a dearth of economic research on long-term aspects of deficits and debt. Governments stand to benefit from knowing more and better, not in general terms – such as rules – but on how their own economy and political systems operate.

He then asked whether fiscal rules can really work. Noting that the introduction of fiscal rules is politically challenging, he thought that the Geneva Report could be of great help to make the issues at stake better understood. But he also pointed out that fiscal rules are not sufficient as such and that implementation is more complex than the presentation of the concept suggests. For fiscal rules to work there needs to be at least an independent agency that reviews their success and implementation, forecasts must be realistic and independently produced, communication should be clear and based on maximum disclosure, and independent research must be developed. Fiscal policy is at least as complex as monetary policy and yet research seems to have been neglected so far. He concluded that this report is a step in the right direction, a welcome effort to shift the focus to a certain degree.

Lars Nyberg, Deputy Governor, Sveriges Riksbank

Lars Nyberg presented the experience of Sweden, a country that has achieved over the past years a good track record in terms of managing fiscal policy and debt, unlike most of the countries analysed. He said that governments seem to have short memories though. He recalled that for several centuries everyone said they would never again bring themselves into a situation, where the incentives favour spending much more than saving.

When Sweden had a problem of rising debt in 1992, it devalued. Growth was fuelled by exports, which helped significantly. Yet, it took until about 1998 for public finances to be brought back into order. The strategy has been carefully discussed, around the principle that 'He who is in debt is not free'. Sweden now has adopted an expenditure ceiling, a key part of the effort to reduce deficit spending. There is also a goal to achieve a budget surplus of at least 1% per year. In addition, regional budgets must be balanced. Parliament decides on budgets 3 years ahead, and they cannot be altered any more after that. This ensures that spending focuses on long-term needs, rather than short-term interests. Loopholes exist, especially in the details, but this has not caused large problems so far. One reason why the system has remained stable is that buffers were introduced to balance budgets in times of need. The main buffer is the 1% surplus target. In addition to planning budgets three years ahead, and setting them in stone, parliamentarians are also required to propose plans for financing any project that they wish to introduce. The experience is that it is particularly difficult to stick to the plan when things are going well, when pressure grows to increase spending on health care or education.

Hans-Jörg Rudloff, Chairman, Barclays Capital

Giving his personal opinion as a practitioner, Hans-Jörg Rudloff started by asking: 'How will we continue to finance all this debt?' He said that the markets – banks, insurance companies, asset managers and more – have massively failed to give the right signals when it became clear that there was a big problem with sovereign debts. They should have said that they would no longer accept the piling up of debt to the extent reached in the European Union. The yield curve across the European Union was essentially flat before the start of the financial crisis. That is extraordinary. The market did not just fail to send the right signal, they sent the wrong one.

When Greece was found to be in crisis (Sunday 9 May 2010), it still needed money. They got it on Tuesday, 11 May 2010. This is another example of a wrong signal, namely that the financial markets would continue to finance public debt, even for Greece, and even after it became clear that the government could no longer service its debt. Huge short positions had been built up at this point. Obviously, market participants knew what would happen. They even knew who held the short positions. Unfortunately the banks would not do themselves a favour by making their actions more transparent, which is why it was hard for counterparties to understand what was going on.

Now all relevant parties know that some Eurozone countries will need to refinance their debt soon. The amounts of money in question are large, and

they will have to be rolled over at some point or another. If governments fail to act now, things will only get worse, he said. He also pointed out that there is no functioning mechanism to address the issue because adequate institutions are missing. In his view, governments are still far from being in a position to handle what may be coming. He also said that, in general, we are far from having reached a system that could function in a crisis, especially because restructuring is not an attractive option, not least for practical reasons.

General Discussion

Hans Genberg, *Assistant Director, Independent Evaluation Office of the IMF*

Hans Genberg highlighted the importance of independent forecasts for GDP, because governments have an incentive to produce optimistic forecasts of GDP growth, in order to be able to spend more. He questioned the approach of viewing the issue of large debts only as a result of institutions. He noted that it could also be a question of mentality. To underline the statement he pointed out that Greece already had the highest debt to GDP ratio under the gold standard. Given that background, can we even change institutions?

Richard Portes, *Professor of Economics, London Business School and President of CEPR*

Richard Portes suggested that the effectiveness of fiscal councils could be overestimated. Reacting to calls for independent forecasts, he pointed out that it has become more difficult to forecast GDP growth. The confidence intervals of forecasts have grown over the past years, so it would be unwise to delegate such a complex task to a fiscal council. Independent forecasts should come from the private sector consensus forecast to limit reputation loss and to increase accuracy. He added that it would be difficult to safeguard the independence of such institutions, particularly because cooperation with government and civil servants is one of the goals.

Ivan Adamovich, *Member of Executive Management, Wegelin & Co.*

Ivan Adamovich thought that the estimates of implicit debts presented in Chapters 3 to 5 were moderate compared to other forecasts. Concerning retirement benefits, he observed that there is simply no one with a strong interest in undertaking fundamental medium-term reforms. Do we have to accept that reforms are simply achieved because of good luck? The serious issue, he suggested, is not how to do the best reforms but how to start reforms. He suggested that the Geneva Report should also take into account that investors are now moving away from public debts.

Jean-Pierre Landau, *Deputy Director, Banque de France*

Responding to Ivan Adamovich, Jean-Pierre Landau asked where investors who move away from government bonds go to. Corporate bonds is one option, but is the market deep enough? Safer? What are the alternative investment vehicles? He remarked that these are essential questions.

Jaques Delpla, *Economist, Conseil d'Analyse Economique*

Jaques Delpla thought that incentives should play a larger role in possible solutions. The Geneva Report spends a lot of time looking for first best solutions but what about more realistic second best strategies? How could that look? In France, for example, there will not be a majority for a fiscal rule.

Edwin Truman, *Senior Fellow, Peterson Institute for International Economics*

Edwin Truman reminded the audience that we have had a common pool problem for centuries. Almost everything that is recommended as a solution in the report, or presented by Steven Cecchetti, has been tried out or done. This does not necessarily mean that previous actions were failures, but it might mean that we have to go through the same cycle again and again, maybe every 15 or 20 or 50 years. This could simply mean that institutions and processes erode over time. The efforts are not fruitless, but the phenomenon is a typical characteristic of the political economy. Presenting the issue in this light might be helpful, he suggested.

Jürgen Von Hagen, *Professor of Economics, Bonn University*

Jürgen Von Hagen answered some of the questions. First he pointed out that institutional reforms happen in periods of crisis. This is when institutions are reformed and improved. Is it the new institution that does the consolidation, or rather the consensus that something needs to be done? He argued that it is a mixture of both. However, it is the institutions that help make the memory of the crises stick in the years afterwards and that is when they become important. As for Europe, he said that the common currency is the main reason for the European Union to deal with the issue. The common currency means that the countries can no longer independently react to adverse shocks. He mentioned the example of France's move from the Fourth to the Fifth Republic, when a fiscal crisis led to important institutional reforms. Denmark, the Netherlands, and Sweden also enacted reforms that proved to be successful and sustainable.

He also reacted to the comment that France had no interest in a fiscal rule. He said that a fiscal rule in France would be silly, because France is not a contractual system. This is one of the central points of Chapter 2; fiscal rules and reform in general have to fit the system of the country where it should be applied.

As for forecast, he observed that the problem is not accuracy but bias, and here again political institutions matter. Consistently biased forecasts of GDP, where the forecast of GDP growth is biased downwards and expenditures upwards, is typical of a contract country, because a coalition is in a much better position when it rewrites the contract if there is a surplus rather than a deficit. In a delegation country, we observe the exact opposite, and that is where an independent forecast should play a big role.

Jeffrey Liebman, *Professor of Public Policy, Harvard University*

Jeffrey Liebman stated that, in the USA, the forecasts of the CBO have performed well. They provide a good basis for the debate on adjustments that have to be

done. Of course the components of an adjustment still need to be discussed. He also underlined that the process of setting up institutions that can address the issue takes several years.

Charles Wyplosz, *Professor of International Economics, the Graduate Institute of International and Development Studies and Director, ICMB, CEPR*

Charles Wyplosz picked up the issue of incentive. The key idea of the report is that if you can internalise the incentives you no longer have a common pool problem. Responding to Stefan Gerlach, he cited works that show that the common pool problem tends to be stronger the more heterogeneous a population is. It is therefore quite probable that there are long-lasting differences between countries. This is not in contradiction with the theory.

Robert Feldman, *Managing Director, Morgan Stanley MUFG*

Robert Feldman quoted the Crisis-Response-Improvement-Complacency (CRIC) model that he has been using for the past 15 years in Japan. The model is very easy to grasp. On the horizontal axis you have growth of the stock market; on the vertical axis, you have the extent of reform currently undertaken. An upward sloping line represents the notion that the more reforms are undertaken, the better the economy will perform. The political side is captured by a downward sloping line: the better the economy performs, the less incentive there is to push for reform. This suggests that crisis is necessary for reform, as observed by Jürgen Von Hagen. It also indicates that the response to the crisis is more effective where solutions are readily available. The question that the report explores is how to reform the process of reform. He then supported the view that using a weighted average of private forecasts would make sense. On the use of incentives, he mentioned civil servants' contract in Singapore as a good example.

Alexander Swoboda, *Emeritus Professor of Economics, Graduate Institute of International and Development Studies*

Alexander Swoboda saw an additional dimension to the role of growth and crises in shaping incentives for reform, namely whether the crisis is international or national. The response to the crisis should be very different in each case. Drawing on the case of Switzerland, he noted that forecasts have been rather conservative recently. This observation made him think that a country's performance in dealing with its public debt follows a historical average.

David Ramsden, *Chief Economic Advisor, Head of Government Economic Service, HM Treasury*

David Ramsden emphasised that he did not see fiscal councils as a 'magic bullet' that solves everything. He would like the report to go further in assessing fiscal councils, especially when dealing with forecasts. He suggests that fiscal councils should do scenario analysis in addition to looking at central forecasts. He underlined again the importance of independence of these councils. His last comment was that the report should try to push into normative space and outline applicable concepts more concretely.

Jean Pisani-Ferry, Director, Bruegel, Brussels

Jean Pisani-Ferry introduced the distinction between economic and fiscal forecasts. For economic forecasts the private sector does well and these forecasts can be useful. However, for fiscal forecasts, the government has a huge informational advantage, which should not be forgotten.

Mark Carey, Senior Adviser, Federal Reserve Board

Mark Carey also commented on the question of how incentives could be integrated explicitly in the report. He states that in the common pool problem, the problem comes from the voters. How to change their incentives? He went on to ask whether it could be envisaged that pension payments would be linked to some measure of debt sustainability over a defined period of time in the past? Working out how to define debt sustainability is another question, but he mentioned looking at interest rate spreads and the debt-to-GDP ratio as two crude examples of what he had in mind.

Daniele Franco, Head of Department, Structural Economic Analysis, Banca d'Italia

Daniele Franco asked if the German constitutional rule, should it fail, could not only be useless but also harmful because it would be focusing attention on the wrong solution. He also added a note of caution to the idea of fiscal councils. He said that in problematic countries with high debt, one needs a lot of information on the debt itself, which might not even be available to the government. How could this problem be addressed?

Jeffrey Liebman, Professor of Public Policy, Harvard University

Jeffrey Liebman did not see it as necessary to use forecasts from private sources. Private budget forecasts typically do not cover a period of more than 18 months ahead. While the consensus forecast from the private sector is a good idea for the short term, for the long term other forecasts are needed.

Jürgen Von Hagen, Professor of Economics, Bonn University

Responding to Daniele Franco's question, Jürgen Von Hagen said that German state governments will not comply as the largest state does not comply. The reason is that state incentives to balance budgets are very small. The federal government, Jürgen Von Hagen added, will comply, but for the wrong reasons. Due to the new rule, all governments are required to have balanced budgets after 2019, except for the federal government. However, the federal government can borrow in the name of state governments, which he believes is likely to happen. He added that the federal government already shares a lot of responsibility related to social policies with state and even municipal governments, effectively mandating local governments to increase spending on its behalf. This contributed to balanced federal budgets over the past years. It has also created more pressure on the states. In his view, this leads state governments to ask the federal government to borrow on their behalf, which would then defeat the purpose of the debt break.

Charles Wyplosz, *Professor of International Economics, the Graduate Institute of International and Development Studies and Director, ICMB, CEPR*

Charles Wyplosz responded to Mark Carey's suggestion of focusing on voters. He wondered whether this idea might be extended, possibly generalised. Why should pensions only be made contingent on debt sustainability, why not roads or anything else? The logic is that the whole budgetary process be linked to public indebtedness.

Mark Carey, *Senior Adviser, Federal Reserve Board*

Mark Carey answered by saying that the key could be indexing fiscal policy to something long term. Ideally to something that concerns people over their whole life.

References

- Abbas, S A, Belhocine, N, ElGanainy, A and Horton, M (2010), 'A Historical Public Debt Database', IMF Working Paper 10/245.
- Afonso, A, Schuknecht, L and Tanzi, V (2003), 'Public Sector Efficiency: An International Comparison', ECB Working Paper 242.
- Aghion, P, Caroli, E and Garcia-Penalosa, C (1999), 'Inequality and Economic Growth: The Perspective of the New Growth Theories', *Journal of Economic Literature*, 37, pp 1615–60.
- Aghion, P and Howitt, P (2006), 'Appropriate Growth Policy: A Unifying Framework', *Journal of the European Economic Association* 4 (April–May 2006), pp 269–314.
- Alesina, A, Baqir, R and Easterley, W (1997), *Public Goods and Ethnic Divisions*. NBER Working Paper No. 6009.
- Alesina, A, Hausman, R, Hommes, R and Stein, E (1999), 'Budget Institutions and Fiscal Performance in Latin America', *Journal of Development Economics* 59, pp 253–73.
- Alesina, A and Perotti, R (1996), 'Fiscal Discipline and the Budget Process', *American Economic Review, Papers and Proceedings*, pp 401–7.
- Alesina, A, Perrotti, R and Tavares, J (1998), 'The Political Economy of Fiscal Adjustments', *Brookings Papers on Economic Activity* 1, pp 197–266.
- Alm, J and Skidmore, M (1999), 'Why Do Tax and Expenditure Limitations Pass in State Elections?' *Public Finance Review* 27, pp 481–510.
- Alt, J E and Dreyer-Lassen, D (2006), 'Fiscal Transparency, Political parties and Debt in OECD Countries', *European Economic Review* 50, pp 1403–39.
- Annett, A (2000), 'Social Fractionalization, Political Instability, and the Size of Government', IMF Working Paper 00/82.
- Annett, A (2005), 'Enforcement and the Stability and Growth Pact: How Fiscal Policy Did and Didn't Change under Europe's Fiscal Framework', Working Paper, European Department, IMF September.
- Annett, A, Decressin, J and Deppler M (2005), 'Reforming the Stability and Growth Pact', IMF Policy Discussion Paper 05/2, Washington DC.
- Auerbach, A, Gale, W and Orszag, P (2006), 'The Budget: Plus Ça Change, Plus C'est la Même Chose', *Tax Notes*, 17 April.
- Auerbach, A, Gale, W, Orszag, P and Potter, S (2003), 'Budget Blues: The Fiscal Outlook and Options for Reform', in H Aaron, J Lindsey and P Nivola (eds), *Agenda for the Nation*, pp 109–43.
- Auerbach, A J and Lee, R (2009), 'Notional Defined Contribution Pension Systems in a Stochastic Context: Design and Stability', in J R Brown, J B Liebman

- and D A Wise (eds), *Social Security Policy in a Changing Environment*, Chicago, University of Chicago Press.
- Ball, L. (1997), 'A Proposal for the Next Macroeconomic Reform.' *Victoria Economic Commentaries March*, pp 1-7.
- Berkmen, S P (2011), 'The Impact of Fiscal Consolidation and Structural Reforms on Growth in Japan', Working Paper No. WP/11/13, IMF.
- Blinder, A (1997), 'Is Government too Political?' *Foreign Affairs* 76, pp 115-26.
- Bos, F (2007) 'The Dutch Fiscal Framework History, Current Practice and the Role of the CPB', CPB Document No.150, CPB Netherlands Bureau for Economic Analysis.
- Buiter, W (1985), 'A Guide to Public Sector Debt and Deficits', *Economic Policy* 1, pp 15-79.
- Buiter, W (2003), 'Ten Commandments for a Fiscal Rule in the EMU', *Oxford Review of Economic Policy*, 19(5), pp 84-99.
- Canova, C and Pappa, E (2005), Does it Cost to Be Virtuous?, NBER Working Paper No. 11065.
- Careaga, M and Weingast, B R (2000), 'The Fiscal Pact with the Devil: A Positive Approach to Fiscal Federalism, Revenue Sharing, and Good Governance', Working Paper, Stanford University.
- Cecchetti, S, Mohanty, M S and Zampolli, F (2010), 'The Future of Public Debt: Prospects and Implications', BIS Working Paper No. 300 (March).
- Congressional Budget Office (2001), *The Economic and Budget Outlook*, FY 2001-11.
- Congressional Budget Office (2011), *The Economic and Budget Outlook*, FY 2011-21.
- Cutler, D (2010), 'How Health Care Reform Must Bend the Cost Curve', *Health Affairs* 29 (6), pp 1131-35.
- Cutler, D, Rosen, A and Vijan, S (2006), 'The Value of Medical Spending in the United States, 1960-2000', *New England Journal of Medicine* 355, pp 920-27.
- Daban, T, Detragiache, E, Milesi-Ferretti, G M and Symansky, S (2001), 'Rules-based Fiscal Policy and the Fiscal Framework in France, Germany, Italy, and Spain', mimeo, IMF, Washington DC.
- Debrun, X, Hauner, D and Kumar, M S (2009), 'Independent Fiscal Agencies', *Journal of Economic Surveys* 23(1), pp 48-81.
- Debrun, X and Kumar, M S (2007) 'Fiscal Rules, Fiscal Councils and All That: Commitment Devices, Signaling Tools or Smokescreens?' in Banca d'Italia (eds.) *Fiscal Policy: Current Issues and Challenges*, pp 479-512.
- Debt Reduction Task Force (2010), *Restoring America's Future: Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-Growth Tax System*, (Bipartisan Policy Center, Washington, DC).
- Dore, O, and Masson, P R (2002), 'Experience with Budgetary Convergence in the WAEMU', Working Paper 02/108, Washington DC, IMF.
- Dornbusch, R and Draghi, M (1990), *Public Debt Management: Theory and History*, Cambridge, Cambridge University Press.
- Economic Policy Committee (2001), 'Budgetary Challenges Posed by Ageing Populations', EPC/ECFIN/655/01-EN.

- Eichengreen, B, Hausmann, R and Von Hagen, J (1999), 'Reforming Budgetary Institutions in Latin America: The Case for a National Fiscal Council', *Open Economies Review* 10, pp 415–42.
- Eichengreen, B and Von Hagen, J (1996), 'Fiscal Policy and Monetary Union: Federalism, Fiscal Restrictions, and the No-Bailout Rule', in H Siebert (ed), *Monetary Policy in an Integrated World Economy*, Tübingen, JCB Mohr.
- Eichengreen, Barry and Charles Wyplosz (1997) 'The Stability Pact: Minor Nuisance, Major Diversion?', *Economic Policy* 26, p.65-114.
- Elmendorf, D (2011), Testimony before the Senate Budget Committee, 27 January.
- Elmendorf, D, Liebman, J, and Wilcox, D (2002), 'Fiscal Policy and Social Security Policy During the 1990s', in J Frankel and P Orszag (eds), *American Economic Policy in the 1990s*, Cambridge, MIT Press.
- Emmerson, C, and Frayne, C (2002), 'The Government's Fiscal Rules', *Institute for Fiscal Studies Briefing Notes* 16 (July).
- Engelberg Center for Health Care Reform (2009), *Bending the Curve through Health Reform Implementation*.
- European Commission (2006), 'Public Finances in EMU', *European Economy* 3.
- European Commission (2008), 'Ageing Report – Underlying Assumptions and Projection Methodologies', *European Economy* 7.
- European Commission (2009), 'Ageing Report', *European Economy* 2.
- European Commission (2010a), 'Public Finances in EMU, 2010', *European Economy* 4.
- European Commission (2010b), 'Progress and Key Challenges in the Delivery of Adequate and Sustainable Pensions in Europe', *European Economy Occasional Paper* 71.
- Fatas, A and Mihov, I (2003), 'The Case for Restricting Fiscal Policy Discretion', *Quarterly Journal of Economics* 118, pp 1419–48.
- Fatas, A and Mihov, I (2004), 'The Macroeconomic Effects of Fiscal Rules in the U.S. States', mimeo, INSEAD.
- Fatas, A, Von Hagen, J, Hughes-Hallett, A, Strauch, R R and Sibert, A (2003), *Stability and Growth in Europe: Towards a Better Pact*, London, CEPR.
- Feldman, R (2010a), 'Revolution: Radical Revamp of Upper House Election System Proposed by DPJ', Morgan Stanley, 13 December.
- Feldman, R (2010b), 'Revolution Update: A Step Forward toward Upper House Reform', Morgan Stanley, 27 December.
- Feldman, R (2011), 'Supreme Court Mandates Electoral Reform, Major Pro-Growth Impact Likely', Morgan Stanley.
- Feldman, R, et al . (2010), 'Deflation: Will America and Europe Follow Japan', Morgan Stanley, 6 September.
- Feldstein, M (2010), 'Preventing a National Debt Explosion', in J Brown (ed), *Tax Policy and the Economy*, vol. 25.
- Garber, A M, and Skinner, J. (2008), 'Is American Health Care Uniquely Inefficient?' *Journal of Economic Perspectives*, 22, pp 27–50.
- Giavazzi, F and Spaventa, L (1988), *High Public Debt: The Italian Experience*, Cambridge, Cambridge University Press.

- Gleich, H (2002), 'The Evolution of Budget Institutions in Central and Eastern European Countries', PhD dissertation, University of Bonn.
- Gruen, N (1997), 'Making Fiscal Policy Flexibly Independent of Government', *Agenda* 4, pp 297–307.
- Guichard, S, Kennedy, M, Wurzel, E and Andre, C (2007), 'What Promotes Fiscal Consolidation: OECD Country Experiences', *OECD Economics Department Working Papers* 553, OECD Publishing.
- Hall, R and Jones, C (2007), 'The Value of Life and the Rise in Health Spending', *Quarterly Journal of Economics*, 122(1), pp 39–72.
- Hallerberg, M and Von Hagen, J (1999), 'Electoral Institutions, Cabinet Negotiations, and Budget Deficits in the EU', in J Poterba, and J Von Hagen (eds), *Fiscal Institutions and Fiscal Performance*, Chicago, University of Chicago Press.
- Hallerberg, M, Strauch, R R and Von Hagen, J (2001), *The Use and Effectiveness of Fiscal Norms and Rules in the EU*, Research Report to the Dutch Ministry of Finance, The Hague.
- Hallerberg, M, Strauch, R R and Von Hagen, J (2007), 'The Design of Fiscal Rules and Forms of Governance in European Union Countries', *European Journal of Political Economy* 23(2), pp 338–59.
- Hallerberg, M, Strauch, R R and Von Hagen, J (2009), *Fiscal Governance in Europe*, Cambridge, Cambridge University Press.
- Hemming, R, and Kell, M (2001), 'Promoting Fiscal Responsibility – Transparency, Rules, and Independent Fiscal Authorities', paper presented at the Banca D'Italia Third Workshop on Fiscal Rules, Perugia, 1–3 February.
- Holtz-Eakin, D and Ramlet, M (2010), 'Health Care Reform Is Likely to Widen Federal Budget Deficits, Not Reduce Them', *Health Affairs*, 29, pp 1136–41.
- IMF (2009), 'Fiscal Rules – Anchoring Expectations for Sustainable Public Finances', Fiscal Affairs Department.
- Irons, J and Bevins, J (2010), 'Government Debt and Economic Growth', Economic Policy Institute Briefing Paper No. 271 (July).
- Jonung, L and Larch, M (2006), 'Improving Fiscal Policy in the EU: The Case for Independent Forecasts', *Economic Policy* 21, pp 491–534.
- Kennedy, S and Robbins, J (2001), 'The Role of Fiscal Rules in Determining Fiscal Performance', Department of Finance Working Paper 2001–16, Ottawa.
- Khemani, S (2007), 'Does Delegation of Fiscal Policy to an Independent Agency Make a Difference? Evidence from Intergovernmental Transfers in India', *Journal of Development Economics* 82, pp 464–84.
- Kiewiet, D R and Szakaly, K (1996), 'Constitutional Limits on Borrowing: An Analysis of State Bonded Indebtedness', *Journal of Law, Economics and Organization* 12, pp 62–97.
- Kontopoulos, Y and Perotti, R (1999), 'Government Fragmentation and Fiscal Policy Outcomes: Evidence from OECD Countries', in J Poterba and J Von Hagen (eds), *Fiscal Institutions and Fiscal Performance*, Chicago, Chicago University Press.
- Kopits, G (2001), 'Useful Policy Framework or Unnecessary Ornament?' IMF Working Paper No. 145.

- Kopits, G and Craig, J (1998), *Transparency in Government Operations*. IMF Occasional Paper No. 158.
- Kopits, G and Symansky, S (1998), *Fiscal Policy Rules*, IMF Occasional Paper No. 162.
- Lao-Araya, K (1997), 'The Effect of Budget Structure on Fiscal Performance: A Study of Selected Asian Countries', IMF Working Paper, Washington DC.
- Leeper, E (2009), 'Anchoring Fiscal Expectations', Reserve Bank of New Zealand *Bulletin* 72(3), pp 17–42.
- Leith, C and Wren-Lewis, S (2005), 'Fiscal Stabilization Policy and Fiscal Institutions', *Oxford Review of Economic Policy* 21, pp 584–97.
- Milesi-Ferretti, G M (2004), 'Good, Bad, or Ugly? On the Effects of Fiscal Rules with Creative Accounting', *Journal of Public Economics* 88 pp 377–94.
- Millar, J (1997), 'The Effect of Budget Rules on Fiscal Performance and Macroeconomic Stabilization', Bank of Canada Working Paper 97-15.
- Mills, P and Quinet, A (2002), 'The Case for Spending Rules', Banca d'Italia Workshop on Fiscal Rules, http://www.bancaditalia.it/studiricerche/convegni/atti/fisc_rules/session2/319-330_mills_and_quinet.pdf
- National Commission on Fiscal Responsibility and Reform (2010), *The Moment of Truth: Report of the National Commission on Fiscal Responsibility and Reform*.
- O'Donoghue, J and Goulding, L (2004), 'Inflation since 1750', *Economic Trends* 604, pp 38–46.
- Office of Management and Budget (2010), Budget of the United States Government, Fiscal Year 2011.
- Peach, R (2001), 'The Evolution of the Federal Budget and Fiscal Rules', paper presented at the Banca D'Italia, Third Workshop on Fiscal Rules, Perugia, 1–3 February.
- Perotti, R, Strauch, R R and Von Hagen, J (1998), *Sustainability of Public Finances*, London, CEPR.
- Persson, M, Persson, T and Svensson, L E O (1987), 'Time Consistency of Fiscal and Monetary Policy', *Econometrica* 55(6), pp 1419–31.
- Piketty, T and Saez, E (2003), 'Income Inequality in the United States, 1913–1998' *Quarterly Journal of Economics*, 118(1), pp 1–39.
- Poole, K T (2005) 'The Decline and Rise of Party Polarization in Congress During the Twentieth Century,' *Extensions* (Carl Albert Congressional Research and Studies Center, University of Oklahoma), Fall 2005, pp 1-6.
- Poterba, J, and Von Hagen, J (eds) (1999), *Fiscal Institutions and Fiscal Performance*, Chicago, University of Chicago Press.
- Reinhardt, U (2008), 'Why Does U.S. Health Care Cost So Much?' *Economix*, 14 November.
- Reinhart C and Rogoff, K (2009), *This Time is Different*, Princeton University Press.
- Reinhart, C and Rogoff, K (2010), 'Growth in a Time of Debt', *American Economic Association Papers and Proceedings* (May).
- Rodden, J, Eskeland, G and Litvack, J (2003), *Fiscal Decentralization and the Challenge of Hard Budget Constraints*, Cambridge MA, MIT Press.

- Roubini, N and Sachs, J D (1989), 'Political and Economic Determinants of Budget Deficits in the Industrial Democracies', *European Economic Review* 33, pp 903–38.
- Rueben, K (1997), 'Tax Limitations and Government Growth: The Effect of State Tax and Expenditure Limits on State and Local Government', mimeo, California Institute of Public Policy.
- Sato, T, Yamaguchi, T and Ohashi, M (2011), 'Rebutting Post-Quake Fiscal Alarm: Keep Concerns in Check but Fiscal Balance Commitment Is Key', Morgan Stanley, Tokyo.
- Schadler, S (2005), 'Enhancing the Credibility of Fiscal Policy – The Role of Fiscal Responsibility Laws and Fiscal Councils', Remarks at the Belgian Constituency Meeting Istanbul, 10 June, mimeo, European Department, IMF.
- Shadbegian, R J (1996), 'Do Tax and Expenditure Limits Affect the Size and Growth of State Government?' *Contemporary Economic Policy* 14, pp 22–35.
- Strauch, R R (1998), 'Budget Processes and Fiscal Discipline: Evidence from the US States', Working Paper, Zentrum für Europäische Integrationsforschung Bonn.
- Strauch, R R and Von Hagen, J (1999), 'Tumbling Giant: Germany's Experience with the Maastricht Criteria', in D Cobham and G Zis (eds), *From EMS to EMU*, London, Macmillan.
- Ter-Minassian, T (2002), 'Institutional Reforms for Fiscal Sustainability with Special Reference to Latin America', Presentation Note, IMF Fiscal Affairs Department, January.
- Velasco, A (1999), 'Debts and Deficits with Fragmented Fiscal Policymaking', in J Poterba and J Von Hagen (eds), *Fiscal Institutions and Fiscal Performance*, Chicago, University of Chicago Press.
- Von Hagen, J (1991), 'A Note on the Empirical Effectiveness of Formal Fiscal Restraints', *Journal of Public Economics* 44, pp 199–210.
- Von Hagen, J (1992), 'Budgeting Procedures and Fiscal Performance in the European Communities', *Economic Papers* 96.
- Von Hagen, J (2004), 'Political Economy of Fiscal Institutions', ZEI, University of Bonn.
- Von Hagen, J (2006a), 'Fiscal Consolidation and Growth', unpublished, University of Bonn.
- Von Hagen, J (2006b), 'Fiscal Rules and Fiscal Performance in the EU and Japan', *Monetary and Economic Studies* 14, pp 25–60.
- Von Hagen, J (2010), 'The Scope and Limits of Fiscal Councils', mimeo, University of Bonn.
- Von Hagen, J, Bordignon, M, Grewal, B, Peterson, P and Seitz, H (2000), 'Subnational Government Bailouts in OECD Countries: Four Case Studies', Interamerican Development Bank Research Network Working Paper R-399. Washington DC, <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=788028>.
- Von Hagen, J and Harden, I (1994a), 'Budget Processes and Commitment to Fiscal Discipline.' *European Economic Review* 39, pp 771–9.
- Von Hagen, J and Harden, I (1994b), 'National Budget Processes and Fiscal Performance', *European Economy, Reports and Studies* 3, pp 315–418.

- Von Hagen, J and Harden, I (1996), 'Budget Processes and Commitment to Fiscal Discipline', IMF Working Paper.
- Von Hagen, J, Hughes-Hallett, A and Strauch, R (2001), 'Budgetary Consolidation in EMU', *European Economy Economic Papers*, No. 148, Brussels, European Commission.
- Von Hagen, J and Wolff, G (2006), 'What Do Deficits Tell Us About Debt? Empirical Evidence on Creative Accounting With Fiscal Rules in the EU', *Journal of Banking and Finance* 30, pp 3259–79.
- Weaver, R K (1986), 'The Politics of Blame Avoidance', *Journal of Public Policy* 6, pp 371–98.
- Weingast, B R, Shepsle, K A and Johnsen, C (1981), 'The Political Economy of Benefits and Costs: A Neoclassical Approach to Distributive Politics', *Journal of Political Economy* 89(41), pp 642–64.
- Wildasin, D (1997), 'Externalities and Bail-outs: Hard and Soft Budget Constraints in Intergovernmental Fiscal Relations', World Bank Working Paper, Washington DC.
- Wren-Lewis, S (1996), 'Avoiding Fiscal Fudge', *The New Economy* 3, pp 128–32.
- Wren-Lewis, S. (2002), 'Fiscal Policy, Inflation, and Stabilization in EMU.' mimeo, University of Exeter.
- Wyplosz, C (2002), 'Fiscal Discipline in EMU: Rules or Institutions?' mimeo, Graduate Institute for International Studies, Geneva.
- Wyplosz, C (2005), 'Fiscal Policy: Institutions versus Rules', *National Institute Economic Review* 191, January, pp 61–78.
- Wyplosz, C (2008), 'Fiscal Policy Councils: Unlovable or Just Unloved?' *Swedish Economic Policy Review* 15, pp 173–92.
- Wyplosz, C (2011a), 'Why is the Debt Crisis Spreading through the Euro Area?', paper presented at the Bernacer Conference, Madrid, 1 June.
- Wyplosz, C (2011b), 'Fiscal Rules', unpublished paper, The Graduate Institute, Geneva.
- Wyplosz, C and Krogstrup, S (2010), 'A Common Pool Theory of Supranational Deficit Ceilings', *European Economic Review* 54(2), pp 269–78.
- Yläoutinen, S (2004), 'The Role of Electoral and Party Systems in the Development of Fiscal Institutions in Central and East European Countries', PhD dissertation, mimeo, University of Jyväskylä.

The importance of fiscal discipline for developed countries has long been ignored or minimised, because they seemed able to borrow and to keep borrowing for decades. The crisis has shown that discipline may be slow to assert itself, but has acutely painful consequences when it does. This 13th *Geneva Report on the World Economy* is devoted to fiscal policy reforms in the US, Europe and Japan. It offers a common political-economy framework to diagnose the need for fiscal consolidation and proposes institutional solutions rooted in that diagnosis. It includes a detailed analysis of how we got to the current situation, as well as a look at the very long run, when demographic factors already in place will sharpen an already degraded situation.

The political-economy framework presents the common pool interpretation of the deficit bias, the widespread tendency of demographic governments to spend more than they can collect in taxes. It arises because those who benefit from public spending are not the same as those who pay taxes. The former ask for more spending, the latter ask for less taxation, and governments need to please voters to be (re)elected. The policy response must address these fundamental characteristics of advanced democracies by adopting institutions and rules that lessen the common pool problem. Because electoral systems differ widely from one country to another, leading to different forms of common pool effects, no single institutional arrangement is best suited everywhere. This report links political systems to forms of institutional arrangements.

At this juncture, when the sovereign debt crisis is acute in the Eurozone, menacing in the US and potentially festering in Japan, the report argues that fiscal stabilization is easier the faster the economy is growing. It also advances suggestions on how to make debts sustainable through growth-enhancing measures.

Centre for Economic Policy Research

3rd Floor • 77 Bastwick Street • LONDON EC1V 3PZ • UK

TEL: +44 (0)20 7183 8801 • FAX: +44 (0)20 7183 8820 • EMAIL: CEPR@CEPR.ORG

WWW.CEPR.ORG

ISBN 978-1-907142-31-4

