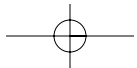
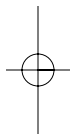
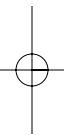
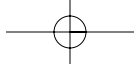


Fiscal Sustainability in Theory and Practice



Fiscal Sustainability in Theory and Practice

A Handbook

Edited by

Craig Burnside



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Preface

As the title suggests, this book is intended as an introduction to the theory of fiscal sustainability and the practice of fiscal sustainability assessment. The preface describes the origins of the book, its motivation, purpose, and intended audience. Chapter 1 begins with an overview of the models and case studies presented and explains why topics such as contingent liabilities, external debt position, and fiscal federalism are not covered in detail.

This work evolved over time, as the need for a resource on fiscal sustainability analysis became apparent to the membership of the World Bank's Quality of Fiscal Adjustment Thematic Group (QFA TG). Fiscal sustainability has become a prominent issue in developing countries, and fiscal sustainability assessments have become an increasingly required component of macroeconomic analysis at the World Bank. Unfortunately, there was no single, basic source of information on this topic. Country economists new to this type of analysis could rely on sample work by other economists at the Bank or delve into scattered journal articles for the theoretical background. Frequently, however, work on fiscal sustainability analysis would be undertaken by hired experts from the Bank's Development Economics Research Group (DECRG), or Poverty Reduction and Economic Management, Economic Policy Group (PRMEP), or by outside academics.

I assumed leadership of the QFA TG in 2001, upon joining PRMEP. At that time, fiscal sustainability analysis was identified as a core area in which this group should provide leadership and support to economists working in

Preface

the regional departments of the World Bank. The membership of the QFA TG—which, despite its name, discusses a wide range of fiscal issues—agreed that the best way for the PRMEP group to provide this leadership and support was through training. To support that training, I embarked on a project to provide pedagogical resources on fiscal sustainability analysis. Those resources have come together in the form of this book.

For those who are unfamiliar with fiscal sustainability analysis, it is—at its core—the use of a simple set of tools to analyze a government's budget and debt positions. In its simplest form, this type of analysis leads to conclusions about the appropriateness of fiscal policy, which are often characterized in terms of the balance between revenue and expenditure given a government's debt level. As suggested above, many World Bank economists are familiar with fiscal sustainability analysis; the process has long been an important part of the Bank's economic and sector work. But for those who are less familiar with the subject, there has been no single reference work that explains it. This book seeks to fill that gap.

As is standard with any reference text, I should describe the intended audience. First, consistent with its original purpose, the book will serve as an integral part of the training courses in fiscal sustainability regularly offered by PRMEP (now known as PRMED) at the World Bank. These courses are aimed at economists who are unfamiliar with fiscal sustainability analysis but need an understanding of it in their daily work. Second, the book will serve as a useful reference work for all economists. A number of handy and standard formulas are presented in the book. Furthermore, many of the worked out examples presented here can easily be replicated in other countries that collect sufficient data. Third, I hope that this book helps build a greater understanding of fiscal policy and the constraints faced by policy-makers. In particular, since many of these constraints are dynamic, a better understanding of fiscal sustainability by economists in developing countries might lead to greater pressure for better fiscal policy in these countries. Finally, I should point out that this book is not aimed at a research audience already familiar with the theoretical concepts described here: Most of the theoretical discussion in this book is neither new nor particularly advanced. Rather, the book collects and presents preexisting work from many sources in a single volume, and makes it accessible to economists with either an advanced undergraduate or basic graduate-level of training.

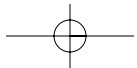
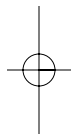
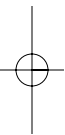
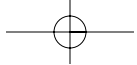
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I also wish to thank three anonymous reviewers for their invaluable comments. Finally, I would like to thank the many students who have taken the fiscal sustainability courses offered by me at the World Bank since 2002. Their comments and suggestions have strengthened the final product considerably.



Contributors

Craig Burnside is the editor of this volume and the author or coauthor of chapters 1, 2, 3, 5, 6, 8, and 9. He is a professor of economics at Duke University in Durham, North Carolina, and a research associate for the National Bureau of Economic Research (NBER) in Cambridge, Massachusetts. He was previously a professor at the University of Virginia, a lead economist in the Poverty Reduction and Economic Management, Economic Policy Group (PRMEP) at the World Bank, and an assistant professor at the University of Pittsburgh and Queen's University. He received a Ph.D. in economics from Northwestern University in Evanston, Illinois.

Punam Chuhan, who contributed chapter 4, is a lead economist in the Global Monitoring Secretariat of the World Bank. Prior to joining the Bank in 1993, she worked as an economist at the Federal Reserve Bank of New York. She received a Ph.D. in economics from Georgetown University in Washington, D.C.

Martin Eichenbaum, a coauthor of chapters 8 and 9, is the Ethel and John Lindgren Professor of Economics at Northwestern University, a Fellow of the Econometric Society, and a research associate for the National Bureau of Economic Research. He has served as a consultant for both the Federal

Contributors

Reserve Bank of Chicago and the World Bank. Previously, he was an associate professor at Carnegie Mellon University in Pittsburgh, Pennsylvania. He received a Ph.D. in economics from the University of Minnesota.

Norbert Fiess, who contributed chapter 7, is an economist in the Office of the Chief Economist of the Latin America and the Caribbean Region of the World Bank (LAC). Prior to joining the Bank he worked at Commerzbank AG and at the University of Strathclyde, in Glasgow, Scotland, where he earned a Ph.D. in international finance.

Yuliya Meshcheryakova, a coauthor of chapters 5 and 6, recently completed a Ph.D. in economics at Northwestern University. She was a research assistant in the World Bank's PRMEP group in 2001, and a consultant to the project that produced this book. She will soon begin work as a lecturer in the School of Economics and Finance at Victoria University of Wellington, in New Zealand.

Sergio Rebelo, a coauthor of chapters 8 and 9, is the Tokai Bank Distinguished Professor of Finance in the Kellogg School of Management at Northwestern University, a faculty research fellow of the National Bureau of Economic Research, a research fellow of the Centre for Economic Policy Research in London, and a consultant to the Federal Reserve Bank of Chicago. He previously was a professor at the University of Rochester, where he received a Ph.D. in economics, and at the Portuguese Catholic University. He also has served as a consultant to the Board of Governors of the Federal Reserve System, the International Monetary Fund, and the World Bank.

Acronyms

ADF	Augmented Dickey Fuller (unit root test)
ARIMA	AutoRegressive Integrated Moving Average (time-series analysis model)
BEA	Bureau of Economic Analysis, U.S. Department of Commerce
BIS	Bank for International Settlements
BK	Baxter-King filter
BN	Beveridge-Nelson decomposition
CAB	current account balance
CEPR	Centre for Economic Policy Research (London)
CODELCO	Corporacion Nacional del Cobre (Chile)
CPI	consumer price index
CSF	Copper Stabilization Fund (Chile)
DSA	debt sustainability analysis
ECB	European Central Bank
EPI	export price index
EU	European Union
FDI	foreign direct investment
FRED	Federal Reserve Economic Data (Federal Reserve of St. Louis database)
FX	foreign exchange

Acronyms

FXR	foreign exchange reserves
GDI	gross domestic income
GDP	gross domestic product
GNI	gross national income
GNP	gross national product
G7	Group of Seven countries (Canada, France, Germany, Italy, Japan, United Kingdom, and United States)
HIPC	heavily indebted poor countries
HP	Hodrick and Prescott filter
ICOR	incremental capital output ratio
IDB	Inter-American Development Bank
IFS	International Financial Statistics
IIE	Institute for International Economics
IIP	International Investment Position statistics (IMF)
IMF	International Monetary Fund
INEGI	Instituto Nacional de Estadística Geografía e Informática (Mexico)
IPi	import price index
LAC	Latin America and the Caribbean region (World Bank)
LCU	local currency unit
NBER	National Bureau of Economic Research
NFA	net foreign asset position
OECD	Organisation for Economic Co-operation and Development
OLS	ordinary least squares
PEMEX	Petroleos Mexicanos (state oil company, Mexico)
PP	Phillips-Perron (test)
PPP	purchasing power parity
PRMEP	Poverty Reduction and Economic Management, Economic Policy Group
PSE	public sector enterprise
PV	present value
QFA TG	Quality of Fiscal Adjustment Thematic Group (World Bank)
TL	Turkish lira
UNCTAD	United Nations Commission on Trade and Development
VAR	vector autoregressive model
VAT	value-added tax