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PACIFIC ECONOMIC OUTLOOK

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Structure Project

Fiscal Policy Issues in the Pacific Region

Japan Committee for Pacific Economic Outlook

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Fiscal Policy Issues in the Pacific Region

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PREFACE

This report on "*Fiscal Policy Issues in the Pacific Region*" is the 8th report in a series of studies conducted by the Pacific Economic Outlook (PEO) Structure Project.[1] The PEO/Structure Project, which is one of the Project Groups under the Pacific Economic Cooperation Council (PECC) deals with longer-term structural economic issues in the Pacific region.

The purpose of this report is to analyze recent developments in the fiscal positions and government debt in the Pacific region and to draw policy implications from the analyses for immediate and future fiscal policy issues.

A decade ago, the North American and European countries were said to have made only limited progress in getting their ratios of public debt-to-GDP right. Also at that time, the Latin American countries had to contain their fiscal imbalances, as well as scale down the level of state intervention in the economy. In contrast, the East Asian economies were known to be rather prudent in government housekeeping with minimal fiscal imbalances and debt.

Ten years later, however, the fiscal picture in the economies of the world appears almost reversed. Particularly in the Pacific region, the advanced economies (with the exception of Japan) improved their fiscal positions significantly and the Latin American economies have taken important steps toward regaining fiscal health. In contrast, several economies in East Asia may face government debt management problems as a result of their heavy reliance on fiscal stimulus in the recovery process out of the Asian economic crisis.

Given the long-shared policy principles for fiscal discipline among policy authorities, what has brought about this contrasting performance in the region? In this volume, the authors scrutinize and compare the experiences of their respective economies in terms of the fiscal policy issues and address future policy concerns. In doing so, we examine the following points:

- How different are the PECC economies in terms of fiscal structure?
- How did fiscal balances and government debt develop in the past several decades and what caused such development?
- At more disaggregated levels, what items in

[1] The previous studies published were *The Emerging Role of the Private Sector in the Asia Pacific Region* (1991); *Changing Patterns of Foreign Direct Investment in the Pacific Region* (1992); *Changing Patterns of Trade in Goods and Services in the Pacific Region* (1994); *Capital Flows in the Pacific Region: Past Trends and Future Prospects* (1995); *Exchange Rate Fluctuations and Macroeconomic Management* (1997); *Domestic Savings in the Pacific Region: Trends and Prospects* (1998); and *Productivity Growth and Industrial Structure in the Pacific Region* (2000).

revenue and expenditure play relatively important roles in the development of the aggregate fiscal positions of these economies?
- What factor caused the contrasting patterns of fiscal development among the PECC economies and how much did these fiscal policies affect development?
- What are the immediate as well as longer-run challenges for fiscal policy management and what can we say about these from what we have learned from our international comparison?

This report is a summary of studies conducted by specialists under the coordination of Dr. Akira Kohsaka.[2,3] The first part of the report provides an overview, prepared by Dr. Kohsaka, of the issues in the Pacific region as a whole. The second part consists of executive summary reports of individual countries/areas submitted by specialists from each PECC member economy.

The PEO/Structure Project held two International Specialists Meetings in September 2000 and March 2001 in Osaka, Japan. These meetings were hosted by the Japan Committee for Pacific Economic Outlook which has been housed in the Kansai Economic Research Center (KERC).[4] The Committee has been sponsored by the Ministry of Foreign Affairs of Japan and the business communities in the Kansai region.

Ambassador Hisashi Owada, who is Chairman of Japan National Committee for PECC (JANCPEC), serves as Chairman of the Japan Committee for Pacific Economic Outlook. Mr. Shinichi Numata, Deputy Executive Director, and Ms. Machiko Fujita, Program Officer, coordinated the management of the PEO/Structure Project. Dr. Janis Kea supported the PEO/Structure Project by checking and editing reports.

The PEO/Structure Project presents this report to the meetings of PECC, the Ministerial meetings of the Asia Pacific Economic Cooperation (APEC), forum of government officials, and individuals in business, government and academic sectors who are interested in economic issues of the Asia-Pacific region.

For more information on the PEO/Structure Project or the Kansai Economic Research Center (KERC), contact the Japan Committee for Pacific Economic Outlook, 29th Floor Nakanoshima Center Bldg., 6-2-27 Nakanoshima, Kita-ku, Osaka 530-6691, Japan
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[2] The PEO/Structure project will publish three volumes in 2001. The first volume is a Summary (this report), the second volume consists of background papers which are full reports of individual countries/areas, and the third volume is the Japanese translation of the overview.

[3] Akira Kohsaka, Ph.D., is Professor of Economics at the Osaka School of International Public Policy, Osaka University, Osaka, Japan.

[4] The Kansai Economic Research Center (KERC) is a nonprofit research organization established in Osaka in 1964, and is supported by the business and academic communities of the Kansai region centered around Osaka, Kobe and Kyoto. The objective of KERC is to contribute to the development of the economy as well as the advancement of social science in Japan.

PACIFIC ECONOMIC COOPERATION COUNCIL

The Pacific Economic Cooperation Council (PECC) was founded in 1980 at the initiative of the Prime Ministers of Japan and Australia.

PECC aims to serve as a regional forum for cooperation and policy coordination to promote economic development in the Asia-Pacific Region.

PECC is a unique partnership of senior individuals from business and industry, government, academic and other intellectual circles in 25 Asia-Pacific economies.[1] All participate in their private capacity and discuss freely on current, practical policy issues of the Asia-Pacific Region.

PECC advocated the need for a formal, intergovernmental organization in the Pacific from the time of its creation. The regional ministerial process of the Asia Pacific Economic Cooperation (APEC) has realized that goal and now provides PECC with a formal channel by which its practical recommendations can be implemented. PECC is the only nongovernmental official observer of APEC since APEC's formation. PECC provides information and analytical support to APEC ministerial meetings and working groups.

PECC's substantive work is carried out through a range of forums, task forces and project groups. These include Energy, Financial Markets Development, Fisheries, Food and Agriculture, Human Resource Development, Minerals, Pacific Economic Outlook (PEO)-Forecast, Pacific Economic Outlook (PEO)-Structure, Pacific Island Nations, Peer Assistance Review Network, Science and Technology, SME, Sustainable Cities, Telecommunications and Information Industry, Tourism, Trade Policy Forum, and Transportation.

PECC member committees and PECC work groups send tripartite delegations to the PECC General Meeting every two years. In the interim, policy matters are handled by a Standing Committee,[2] and day-to-day administrative and coordinating functions are carried out by the International Secretariat based in Singapore.

For more information on PECC, contact the PECC International Secretariat,
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[1] The PECC economies include Australia, Brunei Darussalam, Canada, Chile, China, Colombia, Ecuador, Hong Kong China, Ecuador, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, the Philippines, Russia, Pacific Islands Forum, Singapore, Chinese Taipei, Thailand, the United States and Vietnam. France (Pacific Territories) and Mongolia are Associate Members. The Pacific Basin Economic Council (PBEC), the regional business organization, and the Pacific Trade and Development Conference (PAFTAD), the regionwide organization of academic economists, are institutional Members.

[2] The Standing Committee is PECC's governing body, which meets several times a year. It includes the Chairs of PECC Committees in each of the 23 full member economies. PBEC and PAFTAD also have seats on the Standing Committee.

OVERVIEW:
FISCAL DEFICIT, DEBT AND CONSOLIDATION IN THE PACIFIC REGION

BY AKIRA KOHSAKA*

1. INTRODUCTION

A decade ago, the North American and European countries were said to have made only limited progress in getting their ratios of public debt-to-GDP right (IMF 1996). Also at that time, the Latin American countries had to contain their fiscal imbalances, as well as scale down the level of state intervention in the economy. In contrast, the East Asian economies were known to be rather prudent in government housekeeping with minimal fiscal imbalances and debt.

Ten years later, however, the fiscal picture in the economies of the world is very different (See Table 1, and Figures 1a and 1b). Particularly in the Pacific region, the advanced economies (with the

Table 1. Fiscal Deficit and Government Debt (as % of GDP)

Fiscal Deficit[a]	1996	1997	1998	1999	2000	Gov't Debt	1996	1997	1998	1999	2000
Australia	-1.3	0.1	0.2	-1.9	-1.9	Australia (GG net)	23.2	21.2	16.8	13.9	9.7
Canada	-1.8	0.8	0.9	2.2	3.4	Canada (GG net)	69.8	65.2	61.9	75.3	66.7
Chile (CG)	2.3	2.0	0.4	-1.5	—	Chile (CG)	16.7	14.5	13.9	15.1	—
China	-0.8	-0.8	-1.2	-2.1	—	China	7.3	8.2	10.9	13.8	—
Colombia	-1.7	-2.8	-3.6	-4.3	-4.3	Colombia (NFPS)	24.7	29.0	33.4	41.1	46.2
Ecuador	-3.1	-2.6	-6.0	-5.9	0.4	Ecuador (NFPS)	75.6	72.1	81.3	123.9	100.9
Hong Kong, China	-0.3	2.2	6.6	-1.8	0.8	Hong Kong, China	—	—	—	—	—
Indonesia (CG)	-2.0	-2.5	-5.7	-3.9	—	Indonesia (CG)	23.9	72.5	53.3	44.4	—
Japan	-4.7	-3.8	-6.1	-7.4	—	Japan (GG)	93.8	103.0	112.7	122.7	—
Korea	0.3	-1.5	-4.2	-2.7	—	Korea (CG)	8.8	11.1	16.1	18.6	—
Malaysia (CG)	0.8	2.5	-1.9	-3.4	—	Malaysia (CG)	37.1	33.7	38.3	40.1	—
Mexico	-0.1	-0.6	-1.2	-1.1	-1.0	Mexico (GG)	30.5	25.4	27.5	24.5	24.0
New Zealand (CG)	3.6	2.0	2.6	1.8	1.4	New Zealand (CG net)	31.0	26.4	24.5	21.7	20.4
Peru	-1.1	-0.4	-0.6	-3.1	-2.6	Peru (PS)	36.5	33.9	36.1	39.9	—
Philippines (CG)	0.3	0.1	-1.9	-3.7	-4.1	Philippines (PS)	98.9	105.6	104.8	116.2	—
Singapore	10.6	11.7	1.7	4.2	—	Singapore	—	—	—	—	—
Chinese Taipei	-3.1	-2.1	0.7	-0.5	-3.3	Chinese Taipei	10.2	11.3	11.1	10.4	—
Thailand (CG)	2.6	-1.3	-0.9	-3.6	-2.4	Thailand (PS)	14.9	47.5	59.6	66.2	65.5
United States	-2.2	-0.9	0.3	1.0	2.2	United States (TG)	67.4	65.6	63.4	61.7	57.0
Vietnam (CG)	-0.2	-0.8	-0.8	-0.9	—	Vietnam	—	—	—	—	—

Notes: — Not available.
Fiscal deficit refers to the deficit of general government, unless otherwise noted. GG=general government, NFPS= nonfinancial public sector, PS=public sector, TG=total government and CG=central government.
Government debt is gross, unless otherwise noted.
Sources: Papers submitted to the Japan Committee for PEC; World Bank (2001); and International Monetary Fund (2001).

* Coordinator, PEO/Structure Project

Figure 1a. Fiscal Balance, 1990-1999
(as % of GDP)

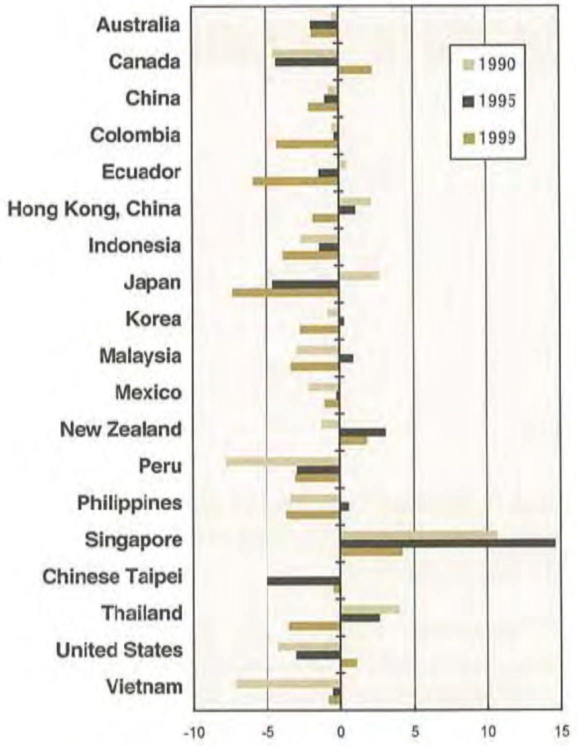
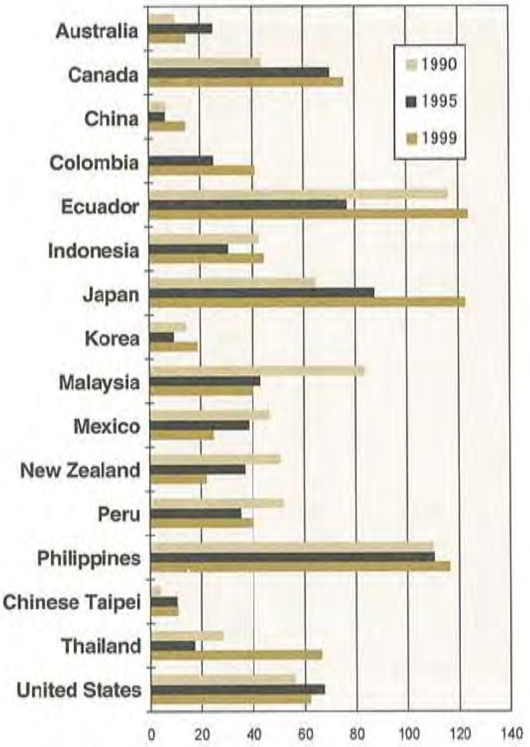


Figure 1b. Government Debt, 1990-1999
(as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

exception of Japan) made a great leap forward and the Latin American economies have taken important steps toward regaining fiscal health. In contrast, several economies in East Asia may face government debt management problems as a result of their heavy reliance on fiscal stimulus in the recovery process out of the Asian economic crisis.

Looking at these past developments, it is high time to review the past, as well as look into future issues for fiscal policy from both the macroeconomic and microeconomic perspective. The former covers issues of macroeconomic stability and sustainability, and the latter those of efficiency and consolidation. A basic dilemma between short-run demand management and long-run debt dynamics will be considered in the former, while renewed adequate division of labor between the public and private sectors will be discussed in the latter.

Given the long-shared policy principles for fiscal discipline among policy authorities, what has brought about the contrasting performance in the region as noted above? In this volume, the authors scrutinize and compare the experiences of their respective economies in terms of the fiscal policy issues and address future policy concerns.

Two specialist meetings were held in Osaka in 2000 and 2001, where the individual economy experiences were discussed. These case studies are summarized in the latter half of this report. This chapter provides an overview of fiscal policy issues in the Pacific region across the PECC economies and from the perspective of international comparison.

Our main conclusions can be summarized as follows:

- The PECC economies are quite diverse in fiscal structure. The degree of centralization, size and organization of government, composition of fiscal revenue and expenditure, and institutional arrangements are all very different across the economies. Canada, China, Colombia, Japan, and the United States are more decentralized than the others. General governments in Australia, Canada and New Zealand are the largest, and they are the smallest in China, Hong Kong, China (hereafter, Hong kong), the

Philippines and Thailand. As to the composition of central government revenue and expenditure, income taxes are a major revenue item in advanced economies, while goods/service taxes and custom duties are also significant in developing economies. Subsidies/transfers are a major expenditure item in advanced economies, while goods/services and capital expenditure are also significant in developing economies.

- In the past three decades, the advanced and developing economies in the region have shown some distinct patterns in fiscal development across global business cycles. Countercyclical fiscal management has occasionally led to debt cycles in both the advanced and developing economies, while the latter appear to have also alternated with a developmental-expansion phase with fiscal deficits and an adjustment-consolidation phase with fiscal surplus. Two transition economies have recently become entangled with these processes in addition to their own agenda for intrinsic needs for fiscal reform as part of economic reform as a whole.

- Reduction in expenditure on subsidies/transfers along with a strengthening of the fiscal framework has been highlighted as an effective approach for fiscal consolidation recently. Noting the close linkage between business cycles and fiscal development, however, strengthening revenue bases is also indispensable, especially for consolidation under recession, which is the current situation in many economies. Since we are not certain whether fiscal consolidation will stimulate or repress demand in the short run, caution should be followed in terms of the speed and sequencing of implementation. Among the advanced economies, fiscal consolidation is most needed in Japan. However, Canada and the United States are not yet completely free from potential risks with their high debt-to-GDP ratios. Australia and New Zealand seem to have gotten over the problem thus far, but not without costs.

- Since the 1980s, the developing economies in the PECC region have made significant progress in fiscal consolidation. Nevertheless, the Asian economic crisis with the subsequent financial sector distress and severe currency depreciation hit East Asia and other developing economies hard, particularly for those with relatively high debt-to-GDP ratios. It appears that these economies will have to suffer an additional round of fiscal consolidation in the future. At issue is how to reconcile the short-run accommodative fiscal policy with longer-run consolidation. Colombia, Ecuador, Indonesia, Peru, the Philippines and Thailand are facing these challenges, while Chile and Mexico paid high costs in the 1980s. China, Korea, and Chinese Taipei appear to have maintained their fiscal health thus far.

- In many areas, including provision of an adequate social safety net, development of infrastructure and education, the fiscal needs are ever-increasing along with the general trend in globalization and demographic changes. In order to meet these needs, we need to keep on rationalizing and optimizing both the revenue and expenditure sides of the budget in terms of both size and composition. This is applicable not only to the developing economies that are relatively lacking in fiscal resources (for example, China and Vietnam), but is also relevant for all member economies in the PECC region, including the advanced economies as well as surplus economies like Hong Kong and Singapore.

In Section 2, the diversity of the fiscal structures and their development in the Pacific region is reviewed and summarized. Brief observation of fiscal development in the past three decades across the economies of the region is summarily depicted in Section 3. Subsequently, Section 4 provides closer examination of more recent fiscal developments, and focuses on the impact of the Asian economic crisis. More detailed scrutiny is presented in Section 5, by looking at disaggregated expenditure and revenue items to identify the causes and/or factors that affected the process of fiscal consolidation. Finally, in Section 6, challenges to future fiscal management and consolidation are discussed.

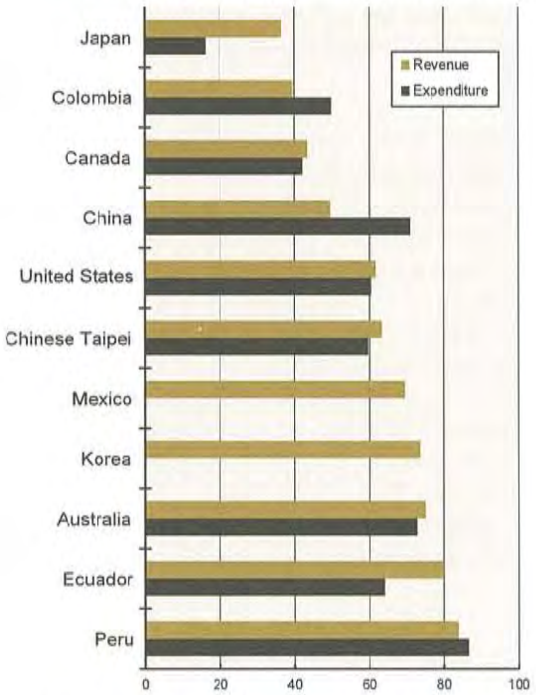
2. FISCAL STRUCTURE

2.1 DEFINITION OF GOVERNMENT

The concept of government that we are concerned with, i.e., general government (GG), goes beyond the central government (CG). General government is the consolidated account of the central government, provincial and other local governments, plus other government entities including social security funds. Nonfinancial government enterprises are sometimes included as part of general government, where the treatment differs across economies. Statistical information on general governments, however, is not always easily available or reliable, and as a consequence, may not be comparable.

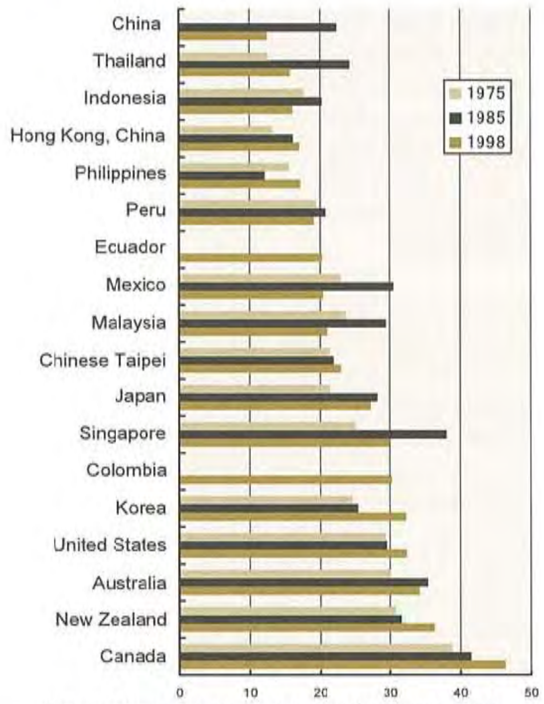
Given these limitations of the data on general government, we nevertheless choose to use the broader concept because the coverage of central government has declined in advanced economies and is likely to do so in developing economies in the near future. As such, focusing only on CG would not enable us to grasp the whole gamut of transactions between the private and nonprivate sectors.

Figure 2. **Fiscal Centralization,1998**
(%, ratio of central government to general government)



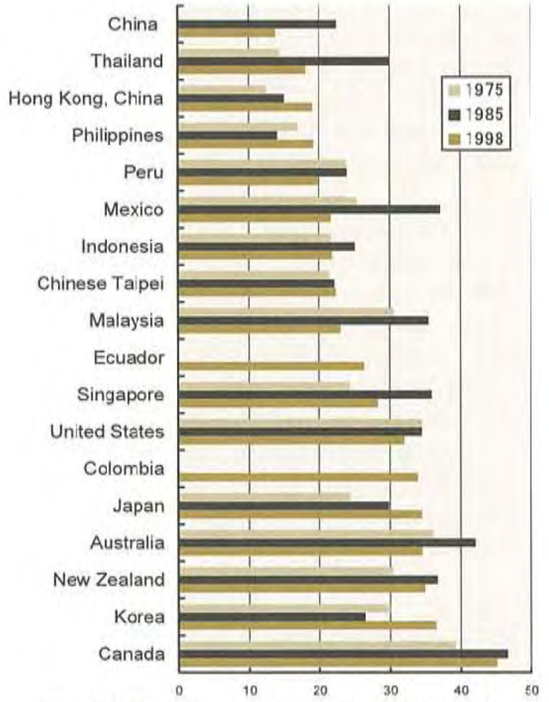
Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

Figure 3a. **Size of Government by General Government Revenue (as % of GDP)**



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

Figure 3b. **Size of Government by General Government Expenditure (as % of GDP)**



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

2.2 FISCAL DECENTRALIZATION

The PECC economies are diverse in terms of their fiscal structure which often consists of several layers of governments. Some economies adopt a federal government structure and are relatively decentralized, while others centralize both the revenue and expenditure side of government activities. We can see to what extent a fiscal structure is decentralized by looking at the size of the central government relative to general government in terms of revenue and expenditure (Figure 2).

Apart from two city economies – namely, Hong Kong and Singapore, both of which are naturally centralized – provincial and/or local governments play significant roles. The provincial/local governments play a larger role in Canada, China, Colombia, Japan, Chinese Taipei and the United States than is the case for Australia, Ecuador, Indonesia, Korea, Malaysia, Mexico, New Zealand, Peru, the Philippines and Thailand (and probably Vietnam). We note, however, that the apparent decentralization in the former economies does not necessarily imply proportionately greater autonomy of local governments. In fact, various forms of intra-governmental transfers to local governments have often been used by the central government as an instrument to control the fiscal behavior of local governments.

2.3 SIZE OF GOVERNMENT

The size of government relative to the level of economic activity, as defined by the ratio of revenue and expenditure to GDP, are distributed from less than 15 percent to more than 45 percent across the PECC economies (Figures 3a and 3b). Canada is the largest and China is the smallest. Generally, the advanced economies tend to have larger governments – the case for Canada, New Zealand, Australia, the United States and Japan – though the governments in Korea, Colombia and Singapore are also relatively large. Governments in developing economies are significantly smaller in terms of GG activities (and in CG activities as well).

If we look at counterpart data for central governments, however, we see a very different picture, particularly in terms of their relative size, because central governments tend to shrink along with decentralization (Table 2). This is apparent from the data for Canada, Japan and the United States. In terms of revenue in 1997, for instance, Canada and the United States were ranked 6th and 7th instead of 1th and 4th, respectively. The change in Japan was extreme, falling to a rank of 18th instead of 8th. In this respect, China is in a distinctive position; in other words, China has tried hard to centralize fiscal decisions as well as resources since the early 1990s. In fact, its CG revenue

Table 2. Size of Government by Central Government Revenue and Expenditure (as % of GDP)

CG revenue/GDP	1975	1985	1997
New Zealand	31.5	37.3	33.8
Singapore	23.4	27.7	24.6
Australia	19.8	23.8	23.6
Chile	31.9	28.1	23.3
Malaysia	21.3	29.4	23.1
Canada	20.4	19.0	21.8
United States	18.0	19.0	20.2
Vietnam	—	—	20.0
Korea	15.0	16.8	20.0
Ecuador	11.5	17.1	19.8
Philippines	15.4	12.0	19.0
Thailand	12.6	15.4	18.4
Indonesia	17.2	20.7	18.1
Peru	13.4	14.8	17.6
Mexico	12.2	15.4	14.7
Chinese Taipei	13.9	14.6	13.8
Colombia	11.9	12.0	12.6
Japan	9.8	12.5	9.5
China	—	—	5.8

CG expend/GDP	1975	1985	1997
New Zealand	34.9	40.5	32.1
Australia	19.8	26.2	24.7
Vietnam	—	—	22.0
Canada	21.0	24.5	21.5
Chile	34.3	30.4	21.2
United States	20.6	23.4	20.6
Ecuador	12.1	15.1	20.5
Thailand	14.6	20.5	20.3
Malaysia	25.2	28.5	19.7
Philippines	16.0	11.2	19.3
Indonesia	19.4	21.1	18.0
Korea	15.6	16.3	17.4
Peru	16.1	17.4	17.3
Singapore	17.9	27.2	16.9
Mexico	14.7	23.5	16.3
Colombia	12.5	14.1	16.1
Chinese Taipei	12.7	14.3	13.8
China	—	—	8.1
Japan	14.7	17.2	5.7

Note: — Not available.
Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

increased from 5.3 percent of GDP in 1990 to 6.2 percent in 1998, while its GG revenue decreased from 15.8 percent to 12.6 percent (the data are not reported in Table 2 but were taken from World Bank 2001 and papers prepared for the Japan Committee for Pacific Economic Outlook).

2.4 REVENUE STRUCTURE

The fiscal structure depends heavily on the level of economic development or per capita income level. Size is one thing and intra-governmental relationships are another, but the structure of fiscal revenue and expenditure also reflects differences in fiscal needs due to different levels of economic development. For international comparison, we use World Bank's *World Development Indicators 2001* (CD-ROM), although this source lacks disaggregated data for Japan after 1994, for Ecuador after 1995 and data for Hong Kong and Chinese Taipei (see Appendix Table 2).

On the revenue side (Table 3), social security taxes are an important source in the United States, Canada, Japan (data are not reported in the Table), and Korea. A relative reliance on either the income tax or the goods/services tax is diverse in the PECC region. Advanced economies such as New Zealand, Australia, Canada and the United States tend to rely on the former, while developing economies tend to rely on the latter. Distinctive differences are also found in the relative reliance on income and custom taxes between advance3d and developing economies. Developing economies have generally shown poor performance in income tax collection partly due to low income levels as well as inefficient tax systems. These economies – particularly, Vietnam, the Philippines, Malaysia and Thailand – have depended more heavily on custom duties. Lastly, we note that non-tax revenues played a significant role, though intermittently, in Chile, Malaysia, Singapore and Thailand.

2.5 EXPENDITURE STRUCTURE

On the expenditure side (Table 4), the developing PECC economies tend to have larger shares for wages/salaries, while the advanced economies spend distinctively larger amounts for subsidies/transfers, which is mainly related to social security needs. The developing economies in East Asia generally spend more on capital formation than the Latin American economies. Finally, the burden of interest payments impact heavy-debtor economies across PECC, both advanced and developing economies. These economies – Canada, the Philippines, New Zealand, the United States, Malaysia, Mexico, and Colombia – had interest payments of roughly more than 2 percent of GDP in the 1980s and 1990s. Thanks to unprecedented low interest rates, Japan escaped from large interest payments (2.2 percent of GDP, not reported in Table 4) despite recent skyrocketing of its debt burden.

While there are several common characteristics or patterns in fiscal structure, as pointed out above, the structures have never been stable and have not shown any convergence with each other. Rather they have changed to a large extent and these changes have depended partly on endogenous responses and partly on discretionary policy choices. We will discuss these changes in relation to fiscal consolidation in Section 3 below.

3. FISCAL DEFICITS AND DEBT DYNAMICS ACROSS BUSINESS CYCLES

This section reviews long-run fiscal developments across business cycles over the past three decades in the PECC economies. This is to provide general background for analyzing recent policy issues in a long-term and broad perspective. Before going into the individual cases, let us review the basic relationships among fiscal balances and debt accumulation.

Debt dynamics is simple and mechanical. Fiscal deficits, if not monetized, must be financed by increased government liabilities, domestic or foreign. If we denote D, Y, PB and r to represent outstanding debt, real GDP, the primary balance and the real interest rate, respectively, the overall budget balance (–dD), which is defined as equal to the primary balance (PB) minus interest payments (r*D), can be described by the following equation,

$$-dD = PB - r^*D \quad \text{or} \quad dD = r^*D - PB$$

Then, debt dynamics can be expressed as:

$$d\log(D/Y) = (r - (PB / Y)^*(Y / D)) - d\log Y$$

where dlog X = dX/X is the percentage increase in variable X. This relationship implies that in order to stabilize (or decrease) the debt-to-GDP ratio or LHS = 0, GDP growth (dlog Y) must be equal to

Table 3. Central Government Revenue by Item
(as % of GDP)

Social security taxes	1975	1985	1997
United States	5.1	6.2	6.5
Canada	2.0	2.8	4.1
Korea	0.1	0.3	1.9
Mexico	2.2	1.6	1.8
Peru	0.0	0.0	1.5
Chile	3.2	2.1	1.4
Indonesia	—	—	0.5
Malaysia	0.1	0.2	0.3
Thailand	0.0	0.0	0.3
Colombia	1.5	1.1	0.0
Australia	0.0	0.0	0.0
New Zealand	0.0	0.0	0.0
Philippines	0.0	0.0	0.0
Singapore	0.0	0.0	0.0
China	—	—	0.0
Vietnam	—	—	0.0
Ecuador	0.0	0.0	—

Goods/Services taxes	1975	1985	1997
Chile	10.7	11.2	10.8
New Zealand	6.1	6.5	9.0
Mexico	5.3	11.0	8.8
Peru	4.8	8.2	8.7
Thailand	5.5	7.0	7.8
Korea	7.0	7.3	6.8
Vietnam	—	—	6.5
Malaysia	4.5	4.8	6.1
Philippines	3.7	4.4	5.5
Colombia	2.3	3.6	5.4
Indonesia	2.2	3.3	5.1
Australia	3.8	5.8	4.9
Singapore	3.4	3.8	4.8
China	—	—	4.4
Canada	3.0	3.5	3.7
United States	1.0	0.9	0.7
Japan	2.1	2.4	—
Ecuador	2.2	2.3	—

Income taxes	1975	1985	1997
New Zealand	20.7	23.1	20.6
Australia	12.8	14.2	16.0
Canada	11.1	9.4	11.7
United States	10.1	9.5	11.2
Indonesia	11.3	13.7	10.3
Malaysia	8.1	11.2	8.4
Philippines	3.0	3.2	6.8
Singapore	8.6	7.5	6.8
Thailand	2.0	3.2	5.8
Korea	3.4	4.3	5.4
Mexico	4.5	4.0	4.6
Colombia	4.3	2.6	4.4
Vietnam	—	—	4.4
Chile	6.0	3.2	4.1
Peru	3.2	1.4	3.6
China	—	—	0.5
Ecuador	2.9	11.1	—
Japan	6.6	8.4	—

Custom taxes	1975	1985	1997
Vietnam	—	—	4.3
Philippines	6.2	2.8	3.9
Malaysia	6.0	5.8	2.9
Thailand	3.4	3.2	2.2
Chile	2.9	3.1	2.0
Peru	3.0	3.3	1.5
Korea	2.0	2.4	1.3
Colombia	2.2	2.0	1.0
New Zealand	1.1	1.3	0.9
Australia	1.1	1.2	0.6
Mexico	1.3	0.7	0.6
Indonesia	1.8	0.7	0.5
China	—	—	0.4
Canada	1.7	0.9	0.3
Singapore	1.8	1.0	0.3
United States	0.3	0.3	0.2
Ecuador	5.2	3.0	—
Japan	0.3	0.2	—

Nontax revenue	1975	1985	1997
Singapore	6.5	11.2	8.4
Malaysia	2.3	6.9	4.1
Chile	7.0	6.6	3.9
Vietnam	—	—	2.9
New Zealand	2.8	5.7	2.7
Korea	1.3	2.0	2.7
Peru	1.5	1.7	2.2
Philippines	2.1	1.3	2.0
Canada	2.3	2.5	2.0
Colombia	0.7	1.7	1.8
Mexico	0.8	0.7	1.7
Australia	2.0	2.5	1.6
Indonesia	1.5	2.6	1.6
United States	1.3	1.9	1.4
China	—	—	0.2
Japan	0.1	0.6	—
Ecuador	0.9	0.3	—

Note: — Not available.
Source: World Bank (2001).

Table 4. Central Government Expenditure by Item
(as % of GDP)

Wages/Salaries	1975	1985	1997
Thailand	3.8	6.0	5.5
Malaysia	5.9	9.6	5.1
Singapore	6.2	7.8	4.9
Chile	8.6	5.7	4.2
Peru	4.8	—	3.1
Colombia	—	2.8	2.3
Mexico	4.3	4.4	2.3
Korea	2.2	2.3	2.2
Canada	2.6	2.3	2.1
Indonesia	3.1	2.8	1.8
United States	3.0	2.4	1.7
Australia	—	0.4	0.7
New Zealand	7.3	6.5	—
Philippines	4.2	3.8	—

Goods/Services	1975	1985	1997
New Zealand	9.9	10.0	15.8
Singapore	11.9	13.1	9.7
Thailand	7.6	12.1	9.6
Malaysia	11.1	15.4	8.2
Peru	8.0	8.3	6.6
Australia	4.9	6.2	6.4
Chile	12.8	9.8	6.2
Korea	6.7	6.6	4.7
United States	7.0	7.1	4.4
Indonesia	7.7	4.9	4.2
Mexico	5.9	5.8	3.7
Canada	5.0	5.1	3.6
Colombia	—	4.0	3.4
Philippines	8.4	6.3	—
Japan	2.4	2.3	—

Interest payments	1975	1985	1997
Canada	1.7	4.4	3.6
Philippines	0.9	2.6	3.2
New Zealand	2.4	7.3	3.2
United States	1.5	3.7	3.1
Malaysia	2.5	6.6	2.4
Mexico	1.3	9.2	2.2
Colombia	—	0.8	2.0
Peru	1.7	4.6	1.8
Indonesia	0.3	1.6	1.7
Australia	1.1	2.3	1.7
Singapore	1.6	3.1	0.7
Vietnam	—	—	0.6
Korea	0.5	1.2	0.5
Chile	3.5	1.9	0.4
Thailand	1.2	2.9	0.3
Japan	0.8	3.5	—

Subsidies/Transfers	1975	1985	1997
Australia	11.2	15.1	15.2
Canada	13.7	14.6	14.0
United States	11.1	11.5	12.3
New Zealand	19.0	20.7	12.3
Chile	11.2	15.6	11.1
Korea	5.1	6.3	8.5
Mexico	4.1	5.0	8.4
Indonesia	3.4	5.0	6.5
Colombia	—	6.7	6.4
Peru	2.6	1.8	6.2
Malaysia	7.2	3.7	4.6
Philippines	1.5	0.8	3.4
Singapore	1.4	2.7	1.4
Thailand	2.5	1.6	1.3
Japan	8.6	9.0	—

Capital expenditure	1975	1985	1997
Thailand	3.1	3.9	9.0
Vietnam	—	—	5.8
Indonesia	8.0	9.5	5.5
Singapore	2.5	8.4	5.1
Malaysia	4.8	3.0	4.5
Colombia	4.0	2.6	4.2
Korea	3.3	2.2	3.8
Chile	6.8	3.0	3.5
Peru	3.9	2.7	2.8
Mexico	3.5	3.7	1.9
Australia	2.6	2.6	1.4
New Zealand	3.6	2.5	0.9
United States	1.2	1.1	0.8
Canada	0.7	0.4	0.3
Japan	3.0	2.4	—
Philippines	2.4	1.5	—

Note: — Not available.
Source: World Bank (2001).

(or larger than) the real interest rate plus the primary deficit-to-debt ratio. In other words, in the long run, GDP growth must be larger than the real interest rate for a stable debt-to-GDP ratio. In the short run, the primary balance determines the direction of change in debt, i.e., if they are positive, debt will decrease, and vice versa.

Japan provides a good numerical example for understanding the above relationship. Japan's average growth rate was 4.0 percent in the 1980s and 1.3 percent in the 1990s. Suppose the real interest rate is 3 percent in the long run. It is easy to see that Japan turned from being successful in its fiscal consolidation in the 1980s into a heavy debtor in the 1990s. That is, in the 1990s, the Japanese government simply could not afford to create fiscal deficits (this is, of course, all in hindsight). Japan also gives a good example of the dynamic relationship between primary balances and debt dynamics. From Figure 4, it is clear that debt began to decrease when the primary balance turned positive in 1984, and later in 1992, debt began to rebound when the primary balance turned negative.

Now let us turn to the actual developments in the PECC region, in the context of an international comparison.

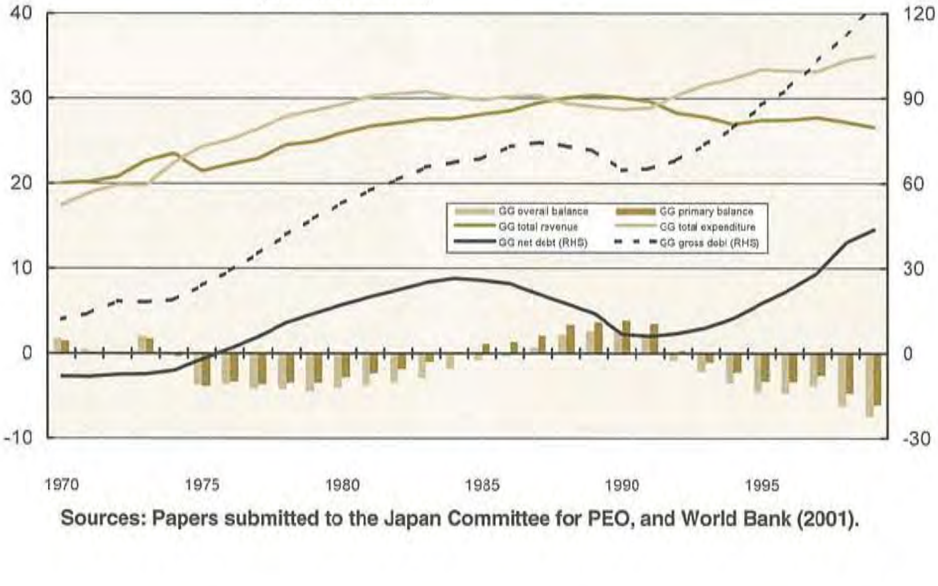
3.1 ADVANCED ECONOMIES

All of the advanced PECC economies have suffered and/or are still suffering from government debt burden in the past three decades (Figure 5). Australia's general government debt peaked out at about 25 percent of GDP in FY94/95; for Canada, debt peaked at more than 70 percent in FY95; New Zealand debt peaked at more than 50 percent in FY92; and in the United States, total debt peaked at almost 70 percent in FY93. Japan has not reached a peak yet with net central government debt of more than 70 percent in FY99.

Among all of the PECC advanced economies, we can see more or less synchronization in the development of fiscal balances. They seem to have experienced three distinct medium-term swings in fiscal deficits in the latter half of the 1970s, the mid-1980s and the first half of the 1990s. Needless to say, each swing had its counterpart business cycle in global economic activities (IMF 2001, Fig. 1.1, p. 3). Though activist fiscal policy has become less popular among academics and multilateral agencies, these governments in fact resorted to countercyclical fiscal policies, i.e., tax cuts and spending expansion to counter economic slowdowns.

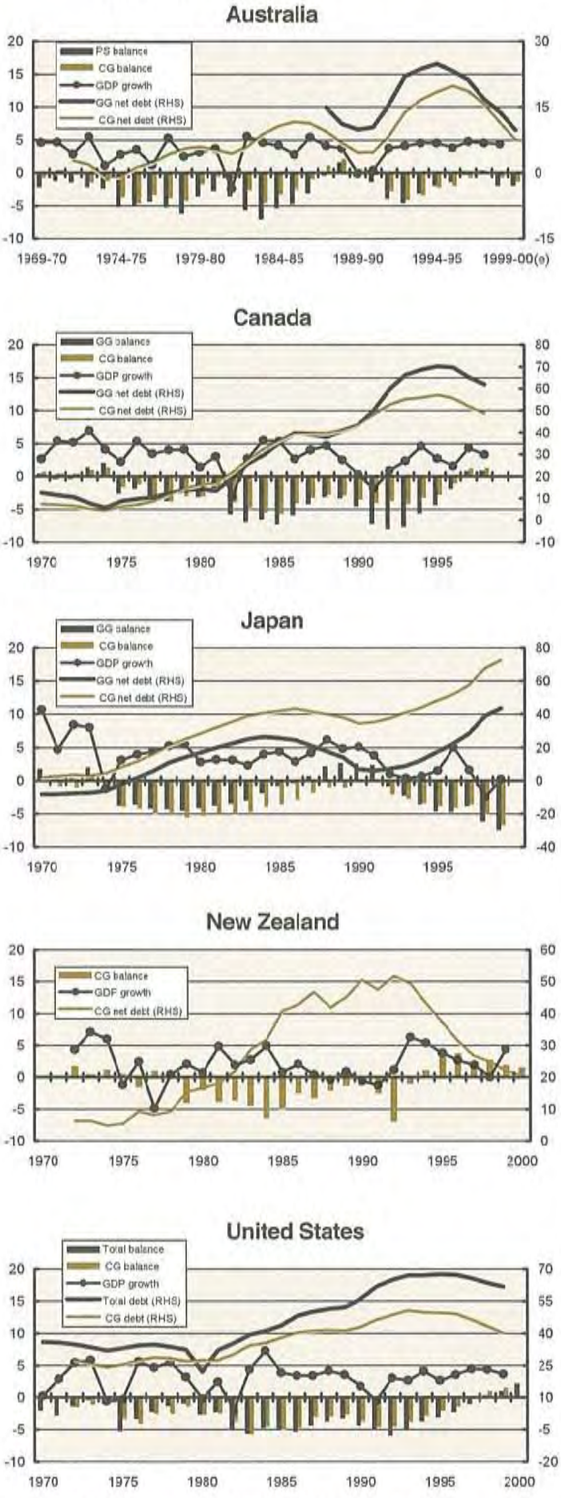
Each time there was a global economic downturn, Australia, Canada and the United States took an expansionary fiscal stance and started and restarted to accumulate government debt. New Zealand began serious fiscal reforms earlier than the others beginning with the second downturn in the 1980s,

Figure 4. Debt Dynamics: General Government, Japan (as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

Figure 5. Fiscal Balance and Debt Dynamics
(as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

and as a result, the economy was better prepared for the next downturn; but this was not without costs as stagnation in the New Zealand economy was prolonged until the early 1990s. Australia, Canada and the United States intensified their efforts toward fiscal consolidation in the early 1990s and appeared to have gained the fruits of their efforts, though part of the improvement in their fiscal positions were the result of economic recovery and changes in the global economic environment.

Against the second global downturn in the 1980s, Japan appeared to have successfully coped with its accumulated debt by the end of the 1980s. This, however, is not due to a second round of serious fiscal reform, but rather is because of an early economic recovery and boom in 1990. As may be well known, the unexpectedly prolonged recession in the 1990s and activist fiscal policies not only resumed increases in debt, but it aggravated the explosive accumulation of debt.

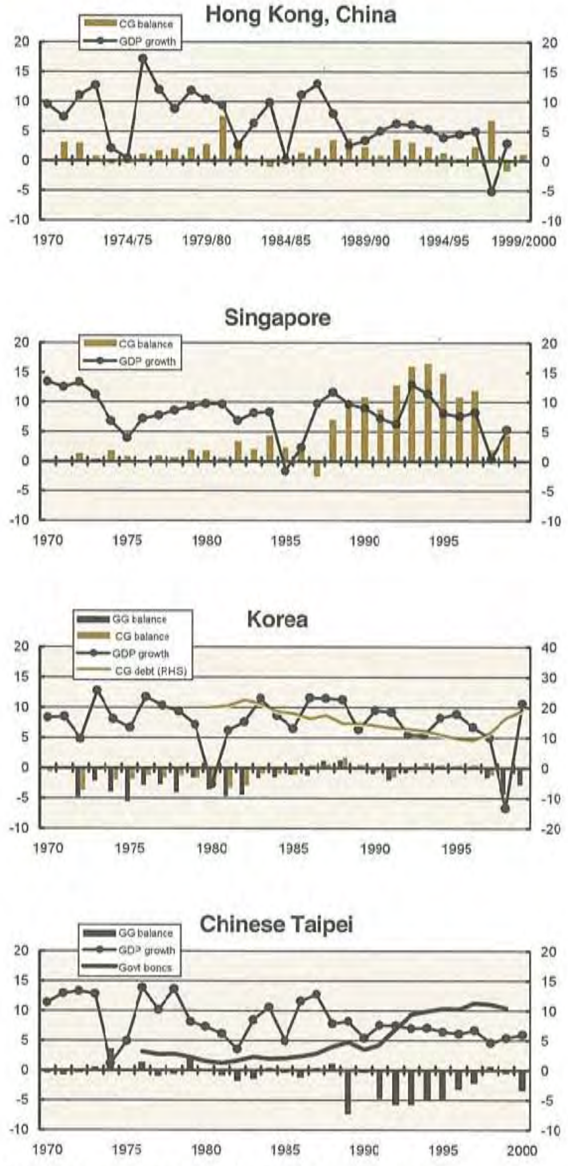
3.2 ASIAN ECONOMIES

3.2.1 ASIAN NIES

Two city economies, Hong Kong and Singapore, have very different stories with regard to their fiscal developments. First, they have been surplus-oriented and actually surplus economies (Figure 5). Second, their main concerns have been focused on how to rationalize the use of their accumulated fiscal surplus, rather than on how to manage government debt. Nevertheless, the presence of government is contrasting between the two; that is, government is small in Hong Kong and large in Singapore.

Hong Kong has had the tradition of non-activist fiscal management for long-run development purposes, except for immediate stabilization such as in response to the Asian financial crisis. While Singapore shares with Hong Kong a respect for fiscal discipline and prudence, Singapore has never been afraid of having big government. A huge government surplus has been transferred to statutory boards or other semi-governmental entities and put to use for various developmental purposes, although transactions between and within them are not clear. In fact, as far as the central government is concerned, its debt is more than 80 percent of

Figure 5. Fiscal Balance and Debt Dynamics, continued
(as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

GDP (not reported here), which should have been netted out if we could have consolidated all government entities into general government.

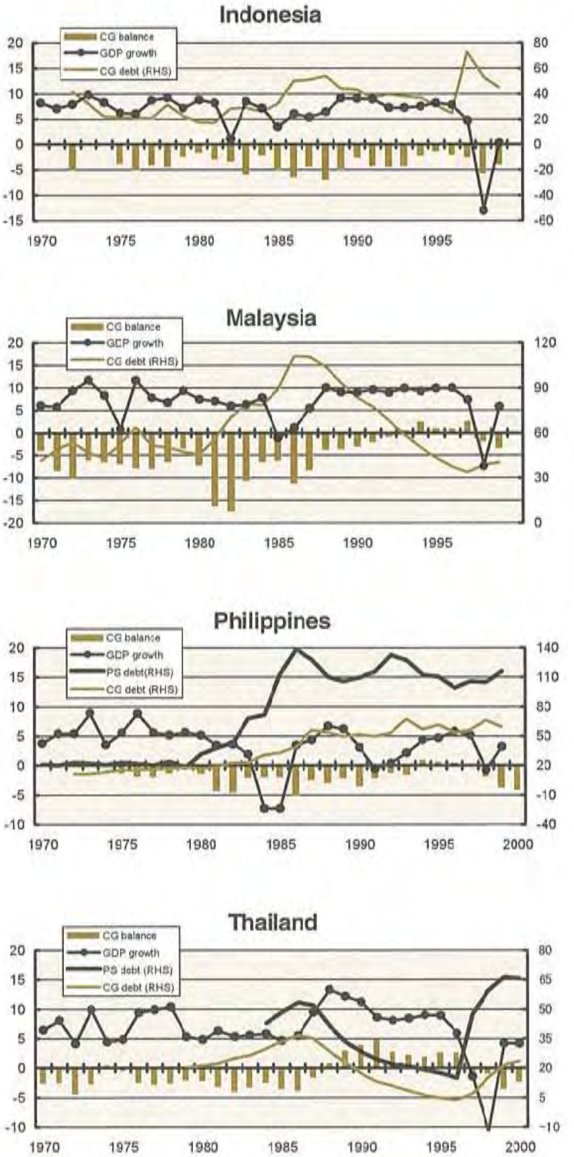
In Korea and Chinese Taipei, fiscal policies were never a frontline policy instrument for stabilization. In Korea, the fiscal balance was persistently in deficit and government debt accumulated to more than 15 percent of GDP along with its general growth orientation throughout the 1970s. In the 1980s, however, there was a policy shift toward a stability orientation so that a balanced budget became the new norm until the Asian economic crisis in 1997. In the recovery process out of the crisis, fiscal stimulus, in turn, played a significant role. Thanks to past fiscal prudence, fiscal deficits and resulting debt increases do not appear to have reached an unsustainable level thus far (Figure 5).
A balanced budget was the norm throughout the 1970s and the 1980s in Chinese Taipei. With a significant long-term decline in private investment in the 1980s, however, Chinese Taipei decided to launch a large-scale public investment plan in 1989. The fiscal balance naturally turned into a significant deficit and government debt began to grow in the 1990s. Facing the Asian crisis, Chinese Taipei quickly streamlined its fiscal balance and its debt was kept far below a sustainable level (Figure 5).

3.2.2 ASEAN4

Governments in ASEAN4 – i.e., Indonesia, Malaysia, the Philippines and Thailand – were more or less indebted even before the Asian crisis (Figure 5). Central government debt peaked at more than 50 percent of GDP in Indonesia (1988), more than 100 percent in Malaysia (1986), 60 percent in the Philippines (1993) and 37 percent in Thailand (1986). Except for the Philippines, however, the ASEAN economies succeeded in reducing their debts significantly before the crisis in 1997. In fact, their debt-to-GDP ratios in 1996 were 25 percent for Indonesia, less than 40 percent for Malaysia, and less than 5 percent for Thailand. In other words, these ASEAN3 were successful in regaining overall fiscal health.

Fiscal reform was one of the most important pillars for the wide-ranging economic reforms that were initiated in 1984 in Indonesia, where the primary balance has been generally maintained in surplus since then. During the global recession in the early 1980s, Malaysia launched an ambitious development strategy with large-scale public investment, resulting in enlarged fiscal deficits and debt accumulation. However, this strategy was given up quickly and more than a balanced budget had been maintained since the mid-1980s up to the 1997 crisis. The Thai government had persistently spent more than its revenue since the first oil crisis

Figure 5. Fiscal Balance and Debt Dynamics, continued
(as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

through the mid-1980s. Government debt peaked in 1986, and fiscal tightening started to improve the budget balance. Subsequently, rapid economic growth helped to keep the primary balance in surplus until the crisis.

Then came the currency and financial crisis in 1997. After the immediate currency turmoil was over, all of the ASEAN3 economies resorted to fiscal expansion both to rescue and rehabilitate the collapsed financial system and to boost dried-up domestic demand. This resulted in plunging fiscal imbalances on one hand and skyrocketing government debt due to rescue funds to address the financial distress and the free fall in currency values. Central government-to-GDP ratios jumped from 20 to 70 percent in Indonesia and from 5 to 20 percent in Thailand. However, public debt was estimated to be far larger than these figures. For example, in 1999, public debt was 96 percent in Indonesia, 56 percent in Malaysia, 74 percent in the Philippines, and 56 percent in Thailand (Table 5).

Table 5. Public Debt and Financial Sector Restructuring: East Asia
(as % of GDP)

	1996	1997	1998	1999
Indonesia	24.5	106.4	103.4	96.0
Financial restructuring	—	39.9	55.3	60.1
Korea	8.8	12.7	24.4	29.6
Financial restructuring	—	1.5	8.5	12.9
Malaysia	47.7	49.0	53.5	56.4
Philippines	68.2	66.4	72.9	74.4
Thailand	14.5	31.1	49.5	56.3
Financial restructuring	1.2	13.8	28.9	31.0

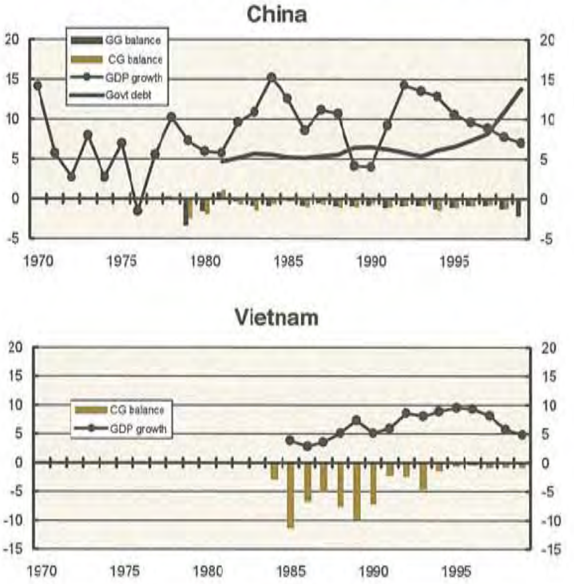
Note: — Not available.
Source: International Monetary Fund (2000, Table 2.6, p.83).

The Philippines has suffered from debt burden since its economic crisis in the early 1980s up to now, i.e., long before the 1997 crisis (Figure 5). Ambitious development plans generated fiscal deficits along with debt accumulation in the latter half of the 1970s and the early 1980s. The economic crisis in the early 1980s aggravated the fiscal imbalances through recession and devaluation, both of which seriously damaged the Philippines' fiscal situation. Although its primary balance turned into surplus as early as 1984 through severe belt tightening, its fiscal situation and debt burden did not show any significant improvement despite a continuous primary surplus (see also Figure 6). The 1997 crisis subsequently eroded the barely attained budget balance into deficit again.

3.2.3 CHINA AND VIETNAM

The transition economies in Asia—China and Vietnam—face very different fiscal challenges than do the other PECC economies. This is because the fiscal system lies at the heart of another key issue: how to reconcile an old centrally planned system with a new market-oriented one. China quickly reduced the size of government from 30 percent of GDP in 1979 to 10 percent in 1995

Figure 5. **Fiscal Balance and Debt Dynamics, continued** (as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

on one hand, and gradually strengthened the central government as opposed to provincial governments on the other (see Figure on p.32). In contrast, Vietnam maintained both government size (at 15 to 25 percent of GDP) and a centralized system (see Figure on p.64). In either case, however, they both could not escape from the impact of a regional economic slowdown due to the 1997 crisis, which in turn affected their fiscal positions.

Since the opening up of the economy in 1979, China has taken a conservative attitude toward fiscal management. Even in the earlier period with the prevalence of soft budgets in state entities, the public sector as a whole kept budgets roughly in balance and the authorities rarely resorted to money- or bond-financing of fiscal deficits. Consequently while there had been few inflationary episodes, there was no persistent inflation nor heavy government debt burdens, though one may be able to point out the potential risks associated with the doubtful quality of public assets. In that sense, activist fiscal management unexpectedly appeared on the center stage because of the Asian economic crisis.

In Vietnam, with macroeconomic stability attained by the early 1990s, economic growth and fiscal improvement proceeded hand in hand until the Asian economic crisis. Thanks to the boom, tax revenue increased and the primary balance turned into surplus in 1995.

3.3 LATIN AMERICAN ECONOMIES

Except for Colombia, the Latin American PECC economies—i.e., Chile, Ecuador, Mexico and Peru—muddled through a similar dismal tunnel, as did the Philippines in the 1980s, as the global financial crisis in 1982 eroded their fiscal positions (Figure 5). Colombia was also hit by the crisis, but thanks to their conservative fiscal management at that time, its fiscal imbalance was short-lived and there was no debt accumulation.

In its crisis management, Chile implemented serious fiscal retrenchment and attained overall budget surplus as early as 1987. Since then, Chile has maintained its overall balance in surplus and continued to reduce its debt-to-GDP ratio up until the Asian crisis. Both in Ecuador and Peru, by contrast, since fiscal retrenchment was half-hearted or almost absent and economic instability and/or stagnation were prolonged and pervasive, cumulative government debt put an increasingly heavier burden on their fiscal positions toward the end of the 1980s.

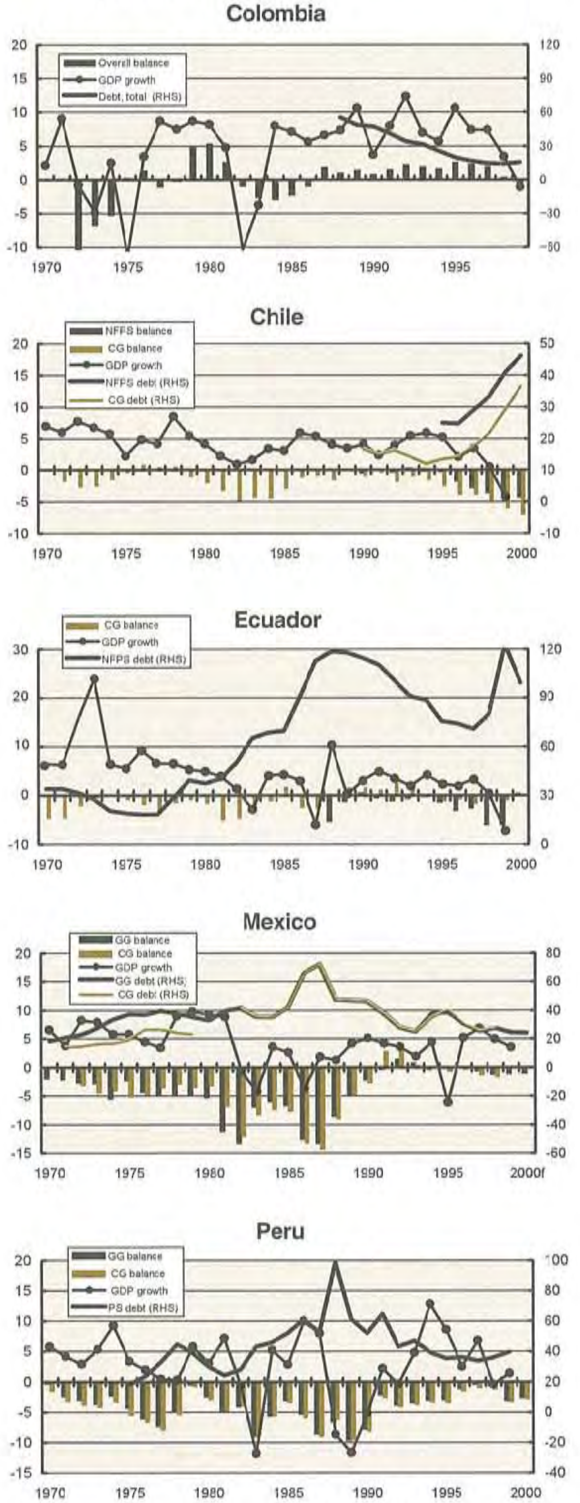
Mexico, the point of origin of the 1982 crisis, paid enormous costs to reduce its persistent fiscal deficits and then to eventually attain fiscal balance in 1991 for the first time in the past few decades.

Aside from fiscal discipline issues, a combination of a heavy reliance on foreign borrowing and currency depreciation helped snowball these costs. Mexico has kept its primary balance positive since 1983, while its overall balance turned to surplus only in 1991 (see Figure 6). In between, the government continued to pay interest burdens, which meant astronomical income transfers from the government or opportunity costs lost on the society.

4. FISCAL DEVELOPMENT AND CONSOLIDATION IN THE 1990S

In this section, we focus more on the recent experiences of fiscal management and look into what factors can explain either the successful or unsuccessful fiscal consolidation in the PECC region.

Figure 5. Fiscal Balance and Debt Dynamics, continued
(as % of GDP)



Sources: Papers submitted to the Japan Committee for PEO, and World Bank (2001).

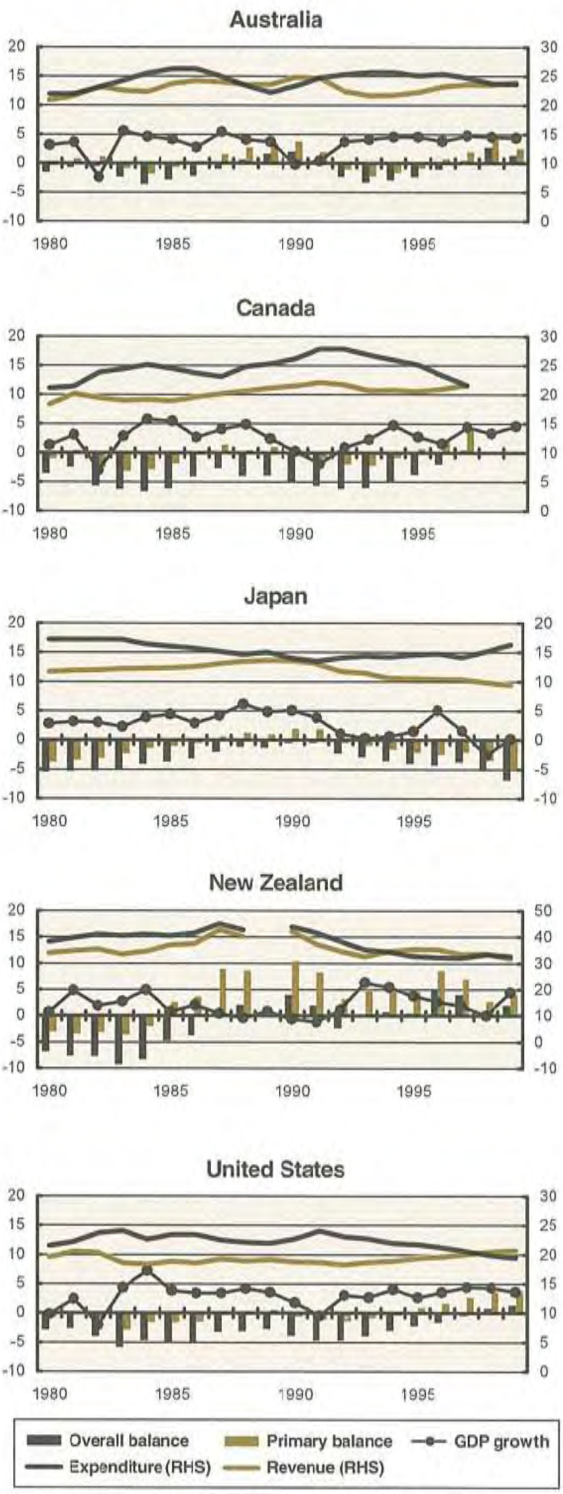
4.1 ADVANCED ECONOMIES

As was pointed out at the outset, in the beginning of the 1990s, the level of government debt was high and increasing in Canada, New Zealand and the United States, while it was low in Australia, and fairly high but decreasing in Japan. In the subsequent ten years, the situation has changed dramatically, and Canada, the United States and New Zealand could realize rather persistent fiscal surplus (Figure 6). Why is this so? IMF (2001) implies that it was mainly because these economies significantly reduced their expenditure from their peaks by as much as 8 percent, 5 percent and 10 percent of GDP, respectively. Australia also shared the same pattern with moderate debt accumulation in the 1990s. Of course, economic recovery contributed to regaining of the fiscal balance by increasing government revenue, but it appeared to be more or less secondary in each case.

What expenditure item was targeted for reduction? Subsidies/transfer payments (see Appendix Table 2). This is the most dominant and most significantly increasing expenditure item in the case of the advanced economies. In fact, in the past three decades, the share of this item expanded from 10 to 15 percent of GDP in Australia, from 13 to 17 percent in Canada, from 12 to 24 percent in New Zealand, and from 9 to 12 percent in the United States. Aside from its welfare costs/benefits, the impact of the reduction on the fiscal balance appears to have been decisively beneficial. Other important items for expenditure cuts included interest payments (Canada and New Zealand), which is the direct result of reduced debt, and military expenditure (the United States).

In the 1990s, facing an unexpectedly prolonged recession that is viewed as being the worst in the past half century, Japan has continued to try and boost its economy through expansionary fiscal measures. This included a deliberate tax cut on the revenue side and expansion of current and capital expenditure on the expenditure side. Both the tax cuts and the prolonged recession hit direct tax revenue hard; as a percentage of GDP, direct tax revenue declined from 14 percent to 8 percent. On the expenditure side, consumption expenditure, investment expenditure and social benefits were expanded by 1 percent, 1 percent and 4 percent of GDP, respectively. Overall deficits reached 7 percent of

Figure 6. Fiscal Development and Consolication
(as % of GDP)



Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

GDP and gross debt amounted to more than 120 (90) percent of GDP for general (central) government in 1999, though increases in net debt were not that large. Is Japan the living evidence that the Keynesian prescription is wrong?

4.2 ASIAN ECONOMIES

4.2.1 ASIAN NIES

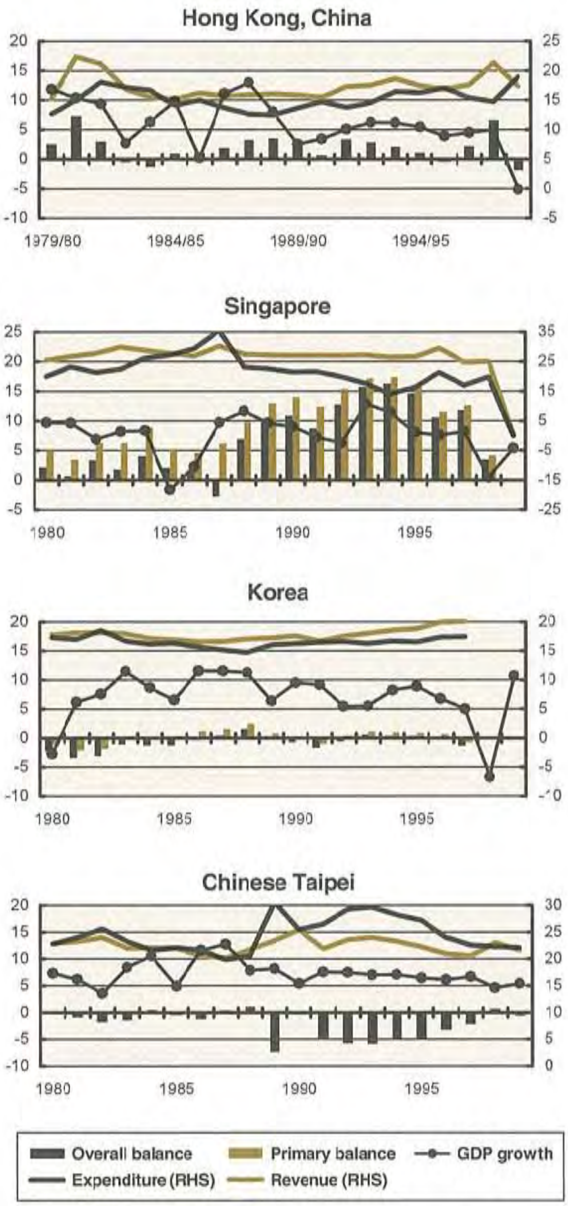
From the viewpoint of debt-burdened economies, Hong Kong and Singapore may appear to be free from fiscal worries, but this perception is not correct. These two very small open economies must be alert to external changes and shocks, and take good care in maintaining their business and investment environments so as to be prepared for adverse climate changes. Fiscal surplus, which resulted from a relative increase in revenue in Hong Kong and from a declining trend in expenditure in Singapore, plays the role of insurance fees or buffers against unexpected shocks (Figure 6).

The relative presence of governments is, however, very different between these two economies. The size of the central government in Singapore is 50 percent larger than that of Hong Kong in terms of revenue and expenditure (as ratios to GDP) even without adding up other government entities (which would make the government in Singapore even larger).

Governments in both economies have been generally neutral against business cycles, but occasionally or in emergencies, the government has resorted to fiscal expansion for stability, as in the case of the 1997 crisis. Low income tax rates have been the norm in Hong Kong and are becoming so in Singapore, which implies that these economies need to invent another stable source of government revenue. In fact, although tax revenue appears to have stagnated, non-tax revenue such as receipts from land sales (Hong Kong and Singapore) and investment income (Singapore) have compensated for conventional fiscal sources (see Appendix Table 2).

As more sizeable economies, Korea and Chinese Taipei have used fiscal policies not as countercyclical instruments but rather for development purposes. With increasing revenue, Korea has reduced its debt ratios since the 1980s through a policy shift to a balanced-budget principle, and

Figure 6. Fiscal Development and Consolication, continued
(as % of GDP)



Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

Chinese Taipei invested in physical and human capital, resulting in fiscal deficits and debt increase in the 1990s through a policy shift out of balanced budgets (Figure 6). While Korea is compelled to resort to fiscal expansion in order to counter the crisis-led slowdown and to pay for remedies, its debt ratio is still at manageable levels, at least for the time being. In contrast, less seriously crisis-hit Chinese Taipei appears to have returned to a neutral position and is constraining expenditure.

4.2.2 ASEAN4

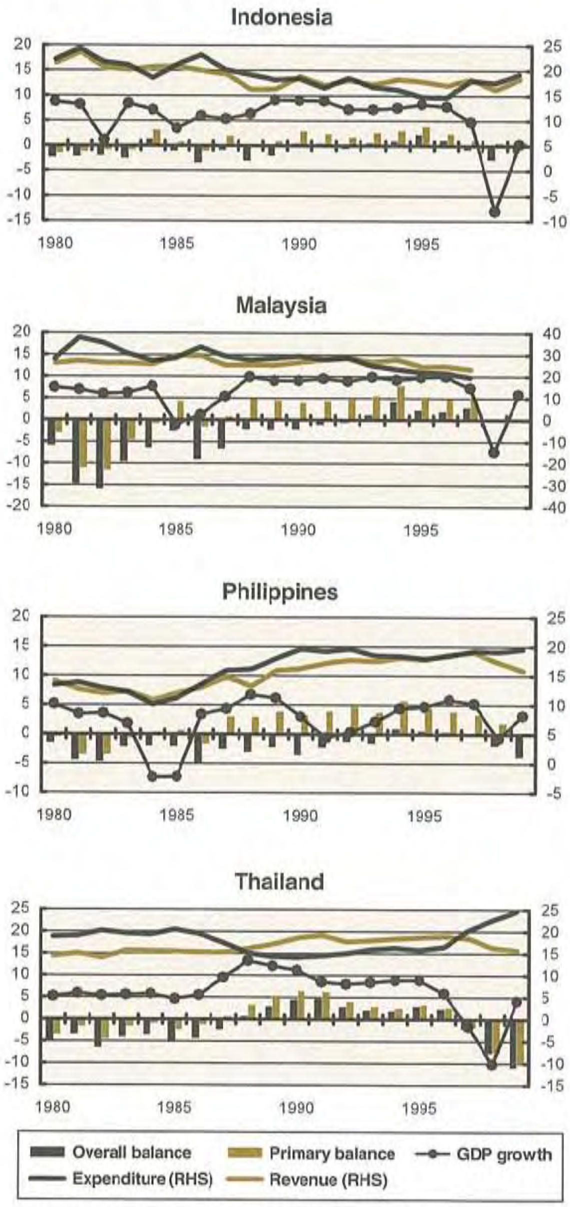
Prudent fiscal management with persistently positive primary balances since the latter half of the 1980s does not appear to have been able to provide much breathing space against compelled fiscal expansion for economic recovery from the 1997 crisis in the ASEAN4 economies. In fact, a primary surplus was generated in these economies through a persistent fall in expenditure (Indonesia and Malaysia) or a continuous rise in revenue (the Philippines and Thailand) (Figure 6). Fiscal needs to boost the domestic economy and to rescue the fragile financial system forced these economies to be set back for at least several years in terms of fiscal and debt management. In the years ahead, increasing interest payments cannot but help to crowd out other expenditure items. Moreover, while currency appreciation tends to help lighten debt service burdens in terms of domestic currency, monetary policy may face a dilemma. The heavier the debt burden, the more serious the social costs. This suggests that, aside from the costs due to their own political turmoil, Indonesia and the Philippines would suffer more seriously and longer than the other two ASEAN4 economies.

4.2.3 CHINA AND VIETNAM

Against the crisis-driven slowdown, China appeared more active than Vietnam in fiscal policy (Figure 6). With a halt in the decreasing trend in government size in 1995, Chinese central government began to expand its resource base. As was the case in the other crisis-hit economies, fiscal expansion constituted one of the two vehicles to help keep up aggregate demand in China (the other was export growth). Naturally, this increased the fiscal deficit and initiated debt accumulation. The debt-to-GDP ratio remains below 20 percent so that it is too early to worry about its sustainability, but once it gives up the balanced budget, China may need new rules of conduct for fiscal discipline.

Since the early 1990s, Vietnam has adhered to a balanced budget, so that its expenditure is constrained by its revenue. While the crisis-driven regional economic downturn hit the economy severely, Vietnam made serious attempts to tighten

Figure 6. Fiscal Development and Consolication, continued
(as % of GDP)



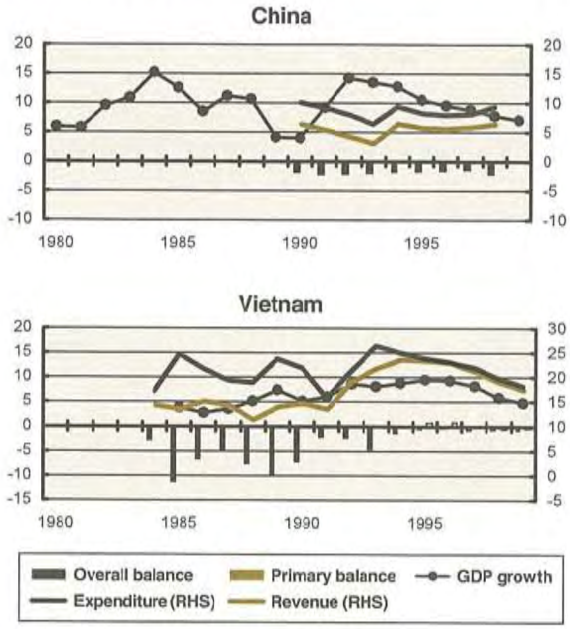
Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

its belt and has avoided a deterioration in the fiscal balance thus far.

4.3 LATIN AMERICAN ECONOMIES

The degrees of fiscal consolidation at the outset of the Asian crisis generated contrasting developments for fiscal balances thereafter in the Latin American PECC economies (Figure 6). While

Figure 6. Fiscal Development and Consolication, continued
(as % of GDP)

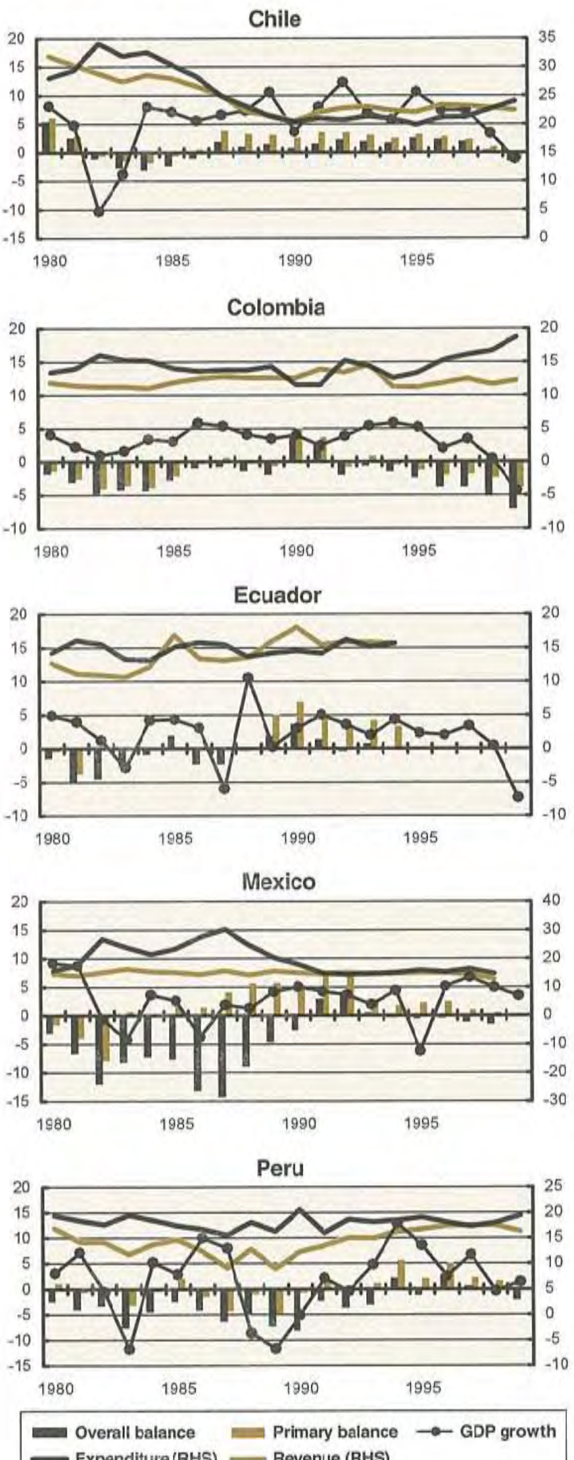


Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

both Chile and Mexico as moderate debtors had some room for discretionary fiscal policy, Chile adopted a countercyclical policy with a worsening fiscal balance. In contrast, Mexico tried to be rather neutral. In both cases, there was a halt in the decline in the government debt ratio, but not a rebound (see Figure 5).

In Colombia, loss of fiscal control on expenditure since the early 1990s appears to have aggravated the economy in facing the economic downturn, resulting in a sharp increase in government and public debt from its initial low level. In Ecuador, retrenchment of the fiscal balance since the late 1980s was halted in the mid-1990s with its debt ratio at nearly 80 percent; thereafter, its fiscal balance plunged into a shaky situation again along with the recent recession. Within a context of wide-ranging economic reforms, fiscal reforms had brought down the fiscal deficit and debt burden in Peru since 1990. However here, too, the recent recession urged the authorities to take countercyclical measures, thereby expanding the fiscal deficit once again.

Figure 6. Fiscal Development and Consolication, continued
(as % of GDP)



Sources: World Bank (2001), and papers submitted to the Japan Committee for PEO.

5. ANATOMY OF FISCAL CONSOLIDATION

The Anglo-phonic economies in the PECC region appear to have been successful in reducing their government debt in the 1990s, where their debt-to-GDP ratios peaked out in the first half of the 1990s, although their levels remain high in Canada and the United States. In Asia, Indonesia, Korea, Malaysia, and Thailand generally piled up government debt in the 1980s, but they also successfully reduced the debt by the time the Asian crisis hit. In Latin America, Chile, Mexico and Peru succeeded in cutting their enormous debt-to-output ratios of the 1980s down to manageable levels by the mid-1990s, though with some turbulence in Mexico in 1994-1995.

At the beginning of the 1990s, Japan looked as if it had completely escaped from debt accumulation through fiscal consolidation efforts during the 1980s, but it did not. Was Japan exceptional? In fact, it appeared that toward the end of the 1980s, Australia, Canada, New Zealand and even the United States were improving in terms of fiscal health, but this turned out not to be true. What then can we learn from these past experiences? Was there any significant difference in the success or failure of their fiscal consolidation efforts or between the 1980s and the 1990s? Or could the apparent successes in the Anglo-phonic economies turn out to be failures?

In order to answer these questions, let us examine the developments of each item of fiscal expenditure and revenue by looking at some fiscal consolidation episodes since the 1980s. Table 6 shows changes in the proportion of expenditure and revenue to GDP over the selected periods of fiscal consolidation for each economy: 1984–1990 and 1993–1998 for Australia, 1983–1987 and 1993–1997 for Canada, and so forth. We basically identify the periods by noting the troughs and peaks of the primary balances of the central governments (based on World Bank data). Accordingly, figures for the primary balances in the table show the wide swings of these balances from the very negative to the very positive. For example, the primary balance of Australia swung from -1.6 percent of GDP in 1984 to 3.8 percent in 1990, a 5.5 percentage point increase over the period. Other expenditure and revenue items are also calculated in the same manner.

Table 6. Contributions to Fiscal Consolidation by Item
(changes over the period, unit = % of GDP)

	Australia		Canada		Japan	New Zealand		United States	
	1984-90	1993-98	1983-87	1993-97	1981-90	1983-87	1992-96	1983-89	1992-99
Overall balance	**5.54**	**5.97**	**3.66**	**6.40**	**4.95**	**10.25**	**7.44**	**3.14**	**5.96**
Primary balance	**5.48**	**6.21**	**4.38**	**6.03**	**5.22**	**12.50**	**5.40**	**3.38**	**5.14**
Expenditure, total	**-2.20**	**-1.88**	**-1.27**	**-5.26**	**-2.76**	4.63	**-6.12**	**-2.10**	**-3.58**
Wages and salaries	0.47	0.07	-0.07	-0.67	0.00	-0.20	**-4.14**	-0.28	-0.57
Goods & services	0.81	-0.30	-0.37	**-1.20**	-0.15	1.72	0.56	-0.68	**-2.06**
Interest payments	-0.06	0.24	0.71	-0.37	0.28	2.24	**-2.04**	0.24	-0.82
Subsidies & transfers	**-3.26**	**-0.85**	**-1.56**	**-3.47**	**-1.49**	0.83	**-4.19**	**-1.77**	-0.66
Capital expenditure	0.31	**-0.97**	-0.05	-0.21	**-1.40**	-0.16	-0.45	0.05	0.00
Current revenue	**2.49**	**1.86**	**1.20**	**0.99**	**2.24**	**9.51**	**0.72**	**0.58**	**2.44**
Social security taxes	0.00	0.00	0.21	-0.11	0.00	0.00	0.00	**0.68**	0.11
Goods & services taxes	-0.34	0.47	-0.02	-0.10	0.03	**3.81**	-0.14	-0.39	0.03
Income taxes	**3.01**	**1.79**	**1.51**	**2.01**	**1.90**	0.65	**2.16**	**0.79**	**2.41**
Custom taxes	-0.06	-0.15	-0.12	-0.19	-0.08	0.16	0.15	0.06	-0.07
Other taxes	0.28	0.23	0.00	0.00	0.27	0.51	-0.32	-0.01	0.12
Nontax revenue	-0.39	-0.49	-0.40	-0.62	0.02	**4.38**	-1.12	-0.54	-0.17

	Indonesia		Korea		Malaysia		Philippines		Thailand
	1986-90	1992-96	1981-88	1991-96	1982-88	1988-94	1981-89	1989-94	1982-90
Overall balance	**3.75**	**1.55**	**4.85**	**1.72**	**13.74**	**6.36**	**2.20**	**3.08**	**10.91**
Primary balance	**3.78**	**0.85**	**4.53**	**1.61**	**16.34**	**3.04**	**7.25**	**1.84**	**10.78**
Expenditure, total	**-4.76**	-3.85	**-2.28**	0.90	**-8.01**	**-4.18**	4.15	0.40	**-6.10**
Wages and salaries	-0.50	-0.48	-0.78	0.14	-1.14	**-2.09**	1.86	-0.39	-0.90
Goods & services	**-1.07**	0.03	**-2.14**	**-0.90**	-0.51	**-2.22**	0.74	-0.45	**-3.42**
Interest payments	0.04	-0.70	-0.32	-0.11	2.60	**-3.33**	5.05	**-1.24**	-0.13
Subsidies & transfers	**-1.21**	0.67	0.49	0.59	**-2.91**	0.32	0.34	1.83	-0.54
Capital expenditure	**-2.52**	**-3.52**	-0.30	1.32	**-7.21**	0.93	**-1.97**	0.26	**-1.99**
Current revenue	-1.08	-0.98	-0.97	**3.22**	-0.79	**2.40**	**3.24**	**2.21**	**4.47**
Social security taxes	0.00	0.46	0.47	**0.94**	0.04	0.11	0.00	0.00	0.00
Goods & services taxes	-0.17	0.38	-1.69	**1.04**	0.24	**1.62**	-0.46	0.08	1.01
Income taxes	**3.59**	-1.14	**1.04**	0.58	-1.78	**1.18**	**1.27**	**1.43**	**1.57**
Custom taxes	0.23	-0.40	-0.12	-0.25	-2.10	-0.66	**1.13**	0.63	1.28
Other taxes	0.19	-0.36	0.16	0.82	0.08	0.87	0.13	0.66	0.53
Nontax revenue	-4.88	0.09	-0.83	0.80	**2.74**	-0.72	**1.16**	-0.58	**6.01**

	Chile	Colombia	Mexico	Peru
	1987-84	1987-82	1992-82	1994-89
Overall balance	**4.87**	**4.04**	**16.09**	**9.38**
Primary balance	**5.53**	**4.61**	**15.21**	**10.41**
Expenditure, total	**-7.70**	**-2.30**	**-12.42**	2.25
Wages and salaries	**-2.28**	-0.28	-1.44	2.97
Goods & services	**-3.09**	-0.54	-1.32	**-1.62**
Interest payments	0.67	0.57	-0.88	1.03
Subsidies & transfers	**-5.13**	**-1.11**	**-7.91**	2.40
Capital expenditure	-0.14	**-1.35**	**-3.52**	0.45
Current revenue	-3.53	**1.53**	**0.05**	**7.35**
Social security taxes	-0.55	0.22	0.22	**1.53**
Goods & services taxes	-0.61	0.29	-1.16	**3.41**
Income taxes	-0.64	0.86	0.85	1.04
Custom taxes	-0.18	0.65	0.37	0.04
Other taxes	-0.44	-0.04	0.12	-0.78
Nontax revenue	-0.62	-0.45	0.17	1.51

Note: The data refer to the difference in each items, as a ratio of GDP, between the beginning and the end of the designated period. Figures in boldface suggest a relatively large contribution to fiscal consolidation.
Source: World Bank (2001).

Since fiscal consolidation can be realized through either a reduction in expenditure or an increase in revenue or both, let us first focus on the relative contribution of these two. Both contributed more or less evenly in the 1980s and 1990s in Australia, and for the 1980s in Canada and Japan. Expenditure reduction played a dominant role in the 1980s in the United States and the 1990s in Canada and New Zealand, and a major role in the 1990s in the United States, while revenue increase was a dominant factor in the 1980s in New Zealand. Note that the IMF (2001) has pointed out that expenditure reduction instead of revenue increase played a major role in fiscal consolidation in the 1990s as compared to the 1980s in the advanced economies.

In other economies in the PECC region, expenditure reduction was dominant in fiscal consolidation in both the 1980s and 1990s in Indonesia, and in the 1980s in Korea, Malaysia, Chile and Mexico, while it was a major factor in the 1980s in Thailand and Colombia, and in the 1990s in Malaysia. Meanwhile, revenue increase contributed dominantly in the 1980s and 1990s in the Philippines and in the 1990s in Korea and Peru.

Now let us look at disaggregated levels, i.e., individual expenditure and revenue items. In the case of the advanced economies, dominant in expenditure reduction was subsidies/transfers. This item was dominant in seven out of nine episodes, among which the notable cases are Australia, Canada, Japan and the United States in the 1980s, and Canada and New Zealand in the 1990s. Among other important items were a cut in capital expenditure in Japan (1980s) and Australia (1990s), and in goods/services in Canada and the United States (1990s), and in wages/salaries and interest payments in New Zealand (1990s).

On the revenue side, an increase in income taxes almost always strongly contributed to fiscal consolidation. In fact it was the largest contributor in Australia (1990s), Japan (1980s) and the United States (1990s). Exceptionally, increases in goods/service taxes and non-tax revenue were the major items in New Zealand in the 1980s.

In other economies, major contributors to fiscal consolidation on the expenditure side are varied and are very different from the advanced economies. Reduction in capital expenditure was either a dominant or major factor in seven out of thirteen episodes. Expenditure cuts in wages/salaries, goods/ services, subsidies/transfers, and interest payments were also sometimes important. On the revenue side, increases in income taxes were the most important contributor to fiscal consolidation as was the case in advanced economies. Other revenue items also contributed such as social security taxes in Korea and Peru in the 1990s, goods /service taxes in Korea, Malaysia and Peru in the 1990s, and non-tax revenue in Malaysia and Thailand in the 1980s.

We can summarize our findings as follows. In the advanced economies, successful fiscal consolidation generally involved an expenditure cut in subsidies/transfers and a revenue increase in income taxes. The former might be a natural choice, because this item is the largest and most rapidly increasing among others in these economies, so that there is relatively large room for discretion. Wages/salaries, goods/services, and capital expenditure could also be reduced. Revenue increase in income taxes at least partially reflects a close linkage between fiscal balances and business cycles, implying that tax buoyancy remains important for fiscal health. Yet, the recent trend towards less progressive taxation tends to weaken this traditional built-in stabilizer mechanism and help put consolidation burdens solely on discretionary spending cuts. However, contrary to the claim made by the IMF (2001), we could not see any change in the pattern of fiscal consolidation between episodes in the 1980s and the 1990s at least in the PECC region.

In other economies, however, fiscal consolidation has been pursued through various channels. One reason is, of course, the diversity of their expenditure structures. Another factor is that, relatively, these economies are small in terms of government size, have low per capita income levels, and are weak in terms of tax and other revenue-raising capacity. Potential problems with past consolidation experiences were that adjustment or consolidation burdens tend to be borne by politically weakly supported, but potentially growth-enhancing sectors. Infrastructure, education and technocracy are likely to be targeted via capital expenditure, goods/ services and wages/salaries, respectively, and this may be what happened and is happening in some developing economies in the PECC region.

6. CHALLENGES TO FISCAL CONSOLIDATION

6.1 ADVANCED ECONOMIES

In addition to the Asian economic crisis, we are now facing a global economic slowdown led by the United States. Although the advanced economies, except Japan, appeared to have succeeded in improving their fiscal positions toward the end of the 20th century, the reality is that they have barely begun to reduce their old debt. As we have seen, fiscal positions are significantly affected by business cycles. A good example is the case of the United States, where the economy was able to reap the full benefit of the peace dividend and of an unprecedented New Economy boom. Once it is over, however, things may return to a starting point that is much like the early 1990s.

At the same time, however, discretionary restraints on some expenditure items such as subsidies/transfers contributed significantly to fiscal consolidation in our experiences of the 1980s and 1990s. A new trend in fiscal consolidation is to strengthen the fiscal framework. Such measures as debt ceilings, deficit targeting, expenditure rules, transparency in fiscal management, etc. have been advocated and implemented in advanced economies including Australia (as reflected in the Charter for Budget Honesty, 1998), Canada and New Zealand (as reflected in the Fiscal Responsibility Act, 1994), and the United States (as reflected in the 1990 Budget Enforcement Act). The fiscal framework is supposed to strengthen fiscal discipline through more accountable and transparent budgetary processes and rules (IMF 2001, Box 3.4, pp. 101–102).

Becoming rich and old is the key factor that determines medium-run future developments of the fiscal positions in these economies. Quantitative restraint on social security cannot be an ultimate solution. We need to optimize fiscal expenditures as well as strengthen the resource base for revenue through tax reform or other alternative measures. As for the former, government employment, medical care and pension plans may have to be restructured, while for the latter, the present tax administration and tax structures themselves may have to be restructured. All of these possible remedies, including the fiscal framework, would also apply to ailing Japan.

6.2 DEVELOPING ECONOMIES

Government intervention, which constrains the market mechanism, has become unpopular and its downsizing has been encouraged. Despite this general trend, it seems paradoxical that the Asian economic crisis possibly widened the role and scope of government. In fact, necessary macroeconomic adjustment after the crisis made activist fiscal actions inevitable and a large amount of private debt, with or without public guarantees, was acquired by government to cope with the systemic crisis of the financial and corporate sectors. In fact, those debts literally became contingent liabilities of government.

The crisis led to increasing fiscal deficits. One reason was a decline in tax revenue due to the business slowdown. In addition, currency depreciation expanded external debt service burdens, thereby increasing fiscal expenditure. Some governments rushed to expand budgets in order to maintain domestic demand, resulting in increasing fiscal deficits even further. Cyclical deficits will disappear along with business recovery, but the public debt will remain.

Contingent liabilities like rescue funds for financial sectors constituted an additional burden on government. As public debt ratios became multiplied, interest payments automatically increased. Indeed, interest burdens amounted to 15–30 percent of the total budget in the crisis-hit economies, which could possibly be more than half in Indonesia and the Philippines in a few years (Table 7). To cope with this, the authorities may wish to restrain total expenditure by cutting social expenditure related to education and public health, and wages and salaries of civil servants. Under the situation where the social safety net must be strengthened, however, it is apparent that these economies cannot manage just by restraining expenditure.

In order to keep their debt levels from going out of control, the crisis-hit economies have no choice but to improve their primary balances, as simple debt dynamics implies. As was shown in Section 3, in order to stabilize the debt-to-GDP ratio, GDP growth must be equal to or larger than the real interest rate plus the primary deficit-to-debt ratio. Since at present primary deficits are estimated to be 0.5–2.5 percent of GDP, income growth must be larger than the real interest rate by an equal percentage, or with GDP growth equivalent to the real interest rate, the primary deficit must be wiped out (Table 8). Otherwise the governments will not be able to restrain debt increases.

Table 7. Public Debt and Interest Payments
(as % of GDP)

	1996	1999
Indonesia	**22.9**	**91.5**
Domenstic debt	0.0	52.5
Foreign debt	22.9	39.0
Interest payments	**0.0**	**3.9**
Korea	**8.8**	**29.5**
Domenstic debt	7.6	22.2
Foreign debt	1.2	7.3
Interest payments	**0.4**	**2.6**
Malaysia	**36.0**	**52.0**
Domenstic debt	31.8	44.0
Foreign debt	4.2	8.0
Interest payments	**2.7**	**3.2**
Philippines	**105.1**	**105.0**
Domenstic debt	72.5	59.6
Foreign debt	32.6	45.4
Interest payments	**4.7**	**6.8**
Thailand	**15.7**	**50.3**
Domenstic debt	7.0	31.3
Foreign debt	8.7	19.0
Interest payments	**0.9**	**2.3**
China	**19.0**	**29.0**
Domenstic debt	6.0	14.0
Foreign debt	13.0	15.0
Interest payments	**0.7**	**2.0**

Source: World Bank (2000, Table 5.1, p.98).

Table 8. Overall and Primary Balance
(as % of GDP)

	1994-96 Average	1999 Overal	1999 Primary
Indonesia	1.0	-1.1	-1.0
Korea	0.9	-2.6	-2.2
Malaysia	4.0	-2.3	-0.6
Philippines	4.1	1.7	1.8
Thailand	1.2	-4.8	-2.2
China	-1.0	-2.5	-2.4

Source: World Bank (2000, Table 5.2, p.99).

Developing economies have had relatively small governments, but the general trend toward globalization and greater market orientation, and moreover, economic development itself is placing pressure for changes in the status quo. The first change is the increasing need for a social safety net. Public employment plans, rural development programs, social security funds and income guarantee mechanisms are being established to protect workers from enhanced global market competition. The second is enhanced needs for education and related investment to cope with the greater orientation toward a knowledge economy and accelerated technological progress. The third change relates to the need for strengthening the industrial infrastructure in order to catch up with globalization and international competition, where transportation, communication and urban infrastructure are targeted.

Finally, insofar as fiscal consolidation involves fiscal contraction, it is important to know the impact of fiscal consolidation on the level of economic activity. Fiscal consolidation reduces aggregate demand, while it also lowers the real interest rate. Thus, it is not clear whether the consolidation leads consumers to anticipate smaller future tax burdens and thus increase their demand. If this holds true, even if deflationary expectations prevailed, the consolidation may enhance growth by breaking these expectations.

Unfortunately, we do not have solid evidence that shows definitely whether the impact of the consolidation on short-run output is positive or negative. In New Zealand in the 1980s, we saw a combination of consolidation and economic slowdown, and in Japan in 1997, the consolidation efforts brought about a severe recession. On the other hand, the experiences of Australia, Canada, and the United States in the 1990s appear to suggest the opposite positive effect on output. Of course, simple correlation cannot tell us much, but sophisticated empirical results that control for other relevant variables have not yet reached any decisive conclusion (Alesina, Perotti and Tavares 1998). This means that we should be cautious on the speed and sequence of fiscal consolidation, especially when it is launched under deflationary situations.

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