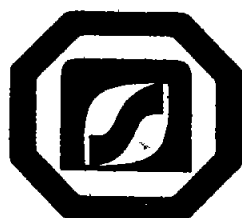


# **FISCAL CONSOLIDATION IN THE SEACEN COUNTRIES: POLICY ANALYSIS AND ASSESSMENT**

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**The SEACEN Centre**

**The South East Asian Central Banks  
Research and Training Centre**

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The SEACEN Centre  
Kuala Lumpur  
September 1999

## FOREWORD

The adverse consequences of expansionary fiscal policy on key macroeconomic variables such as a sharp rise in debt as inflation, investment, and balance of payments have been well documented. Especially in the 1970s and early 1980s, the government-led growth strategy proved to be costly and unsustainable as the magnitude of fiscal deficits/debt increased to an alarming proportion ultimately leading to debt crisis in 1982.

While the situation in most of the SEACEN countries was not that serious, the region as a whole experienced high and increasing fiscal deficits and debt till the first half of the 1980s. The severity of the situation varied with some countries registering fiscal deficits of more than one-tenth of GDP or higher in some years. The situation was subsequently brought under control towards the end of 1980s. Fiscal consolidation which formed part of a structural reform package in some countries contributed to the high growth period and a turnaround to a strong fiscal surplus in the early to mid-1990s.

This study on *Fiscal Consolidation in the SEACEN Countries: Policy Analysis and Assessment* attempts to analyse the magnitude and the quality of fiscal consolidation of the SEACEN countries. The quality of fiscal consolidation here refers to the likelihood of success, defined as a long lasting deficit reduction with positive macroeconomic consequences. To this end, the study has not only concentrated on the size of improvement in government budget but also on the composition of the adjustments, taking into account that adjustment in different components of revenue and expenditure would have different bearing on the economy. Therefore, keeping fiscal deficits at a reasonable level is a necessary condition, one must be careful on the choice of components to be adjusted.

Based on the analysis of the SEACEN fiscal policy in the past two decades, the study finds that cuts in current spending such as wage bill and material purchases have a better chance of producing successful results than the cuts in capital spending and increases in revenue. Though the data constraints on extra-budgetary and quasi-fiscal items inhibit us to present a true fiscal picture, the results based on the central government figures suggest that the region, in general, has achieved a reasonable degree of success in reshaping its central government budget without compromising macroeconomic activities.

This in-house research was carried out by Ram Prasad Adhikary, Senior Economist seconded from Nepal Rastra Bank. He is very much indebted to: Dr. Delano Villanueva, Deputy Director in Charge of Research for guidance and supervision; colleagues in the Research Division of the Centre for comments and suggestions; and Miss Nurulhuda Mohd. Hussain for research assistance. He is equally indebted to Mrs. Kanaengnid Tantigate Quah for editing, and Miss Karen How for reformatting the final manuscript.

The Centre wishes to express its sincere gratitude to the economic research departments of the member central banks and monetary authorities for their input in providing data and information, as well as useful comments and suggestions at various stages of the project. However, the views expressed in this research report are those of author and do not, in any manner, reflect the views of the member central banks and monetary authorities or that of The SEACEN Centre.

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## EXECUTIVE SUMMARY

Up until the first half of 1980s, policy-makers in several countries, including those in the SEACEN region, were reluctant to reduce budget deficit for fear of adversely affecting economic growth through the Keynesian multiplier effect. As a result, high and rising budget deficit was prevalent as government spending was increasing at a much faster rate than government revenue, partly contributing to a sharp reduction in economic growth in some of the SEACEN countries in the mid-1980s.

This study aims to assess the fiscal consolidation measures undertaken by the SEACEN countries in response to the above problem. Based on the consolidated central government data of the SEACEN countries (except for Myanmar and Nepal), the study finds that the measures had been generally successful in reducing fiscal deficits without adverse impact on economic growth. In fact, several countries experienced exceptionally high growth for an extended period after this adjustment.

The study suggests that bold and decisive fiscal consolidation measures can create favourable environment for higher growth by instilling confidence in the private sector. This supports the view of Giavazzi and Pagano (1990) that sharp reduction in budget deficits may help improve the growth performance of an economy not only in the long run, but also during the fiscal consolidation period.

Where success is defined as improving fiscal balance as well as achieving sustainable debt to GDP ratio, the study finds that fiscal consolidation through cutting expenditure is more likely to succeed than by raising revenue. In addition, the bulk of expenditure cutback should come from the current or operating expenditure side. This is also in line with the views of Alesina and Perotti (1996), and McDermott and Wescott (1996) in their studies on fiscal consolidation and its macroeconomic consequences in the OECD countries.

Further, the study finds that the budget cuts have also resulted in a substantially reduced capital expenditure, with adverse implications on the investment of necessary infrastructure. This implies that fiscal consolidation through budget cuts alone may not be sustainable in the long run. Further effort would require measures to enhance government revenue. The generally low tax pressure ratio in the SEACEN region suggests that there is scope for increasing tax revenue by tax-reform measures such as broadening the tax base, expanding the tax net by identifying other possible sources, strengthening revenue-collection administration, and reducing concessions and rent-seeking, etc. It may not be advisable for a country to go against the global trend by increasing the tax rates.

While the success of fiscal adjustments may to some extent depends on the timing of the implementation, our study finds that the dominating factor is in fact the size and composition of the adjustments. This implies that a country which is having a serious debt/deficit problem may not need to wait until the difficult time is over before embarking on a fiscal consolidation programme.

While data on the consolidated central government operations forms a backbone of the fiscal position of a country, it would have been more accurate to include data on the extra-budgetary operations and other quasi-fiscal activities. It is hoped that as data and information on the latter become available, a follow-up study could be conducted to better assess the fiscal positions of the SEACEN countries.

# Chapter 1

## INTRODUCTION

### 1.1 Why Fiscal Consolidation?

The early stage of economic development in most developing countries was characterised by heavy involvement of the public sector in various economic activities, resulting in a steady rise in budget deficits. Initially, such strategy did not adversely affect the economy as the deficits were manageable and could be financed through various means such as seigniorage, inflation tax, or foreign borrowings. The recycling of petrodollars during the 1970's at low borrowing costs led to a further boom of public investment programme, and raised budget deficits and external debt to unsustainable level. When the international interest rates rose and access to external finance became more difficult and expensive, many developing countries were faced with fiscal crisis and the urgent need to reform.

The high budget deficit brought many adverse consequences on the economy. Faced with difficulties to raise revenue or borrow from abroad, many developing countries turned to domestic borrowing. However, the underdeveloped capital markets in the countries led them to rely mainly on the banking sector, particularly the central banks. This resulted in a rapid rise in domestic liquidity, exerting inflationary pressures on the economy. In a repressive financial system, large fiscal deficits would affect the economy in two ways--first, real interest rates would be repressed thus discouraging saving, and secondly, the private sector would be crowded out because of preferential access of credit given to the government.

For countries with a large non-banking sector, the ever-increasing financing needs of the government may contribute to a rise in domestic interest rates.

This would lead not only to a further deterioration in the fiscal burden but also to a crowding out of productive private sector activities. This would also distort the price and allocation of financial resources. Poor fiscal management has led to high inflation, unsustainable external current account deficits and excessive levels of domestic and foreign indebtedness. The emergence of the above problems forced many developing countries (the SEACEN members included) to adopt fiscal consolidation since the 1980s. Though the immediate concern of fiscal consolidation was to correct the fiscal imbalance, the ultimate objective was to ensure a sustainable non-inflationary rate of economic growth. In this context, the success of fiscal consolidation can be assessed by two criteria: the short-run improvement in the fiscal balance, and the enhancement of growth prospects in the long run. The latter criterion is sometimes referred to as the quality of the fiscal adjustments, as fiscal consolidation may be achieved by higher revenue resulting from one-time privatisation or sale of assets, or indiscriminate cuts in spending on projects without considering their long-term growth implications.

Thus, reduction in aggregate fiscal deficits, though necessary for overall economic stability, is not necessarily a sufficient condition for long-term growth. Composition of fiscal adjustments plays a dominant role. In a study on OECD fiscal adjustment, Alesina and Perotti (1996) have found that fiscal adjustments relying primarily on spending cuts on transfers and the government wage bill have a stronger chance of being successful and exert expansionary impact on the economy. Whereas, a fiscal adjustment relying on tax increases and reduced public investments tends not to last long and is contractionary. To some extent, this is applicable to many of the SEACEN countries as budget allocation to subsidies and transfers as well as wages are also high. In many countries, the main burden of adjustments has been borne by capital expenditure, as shown by its declining share in GDP. Barring a few exceptions, these countries have not achieved much success in adjusting current expenditure as well. Similarly, the current low level of revenue mobilisation in some countries suggests that there is room for raising the revenue collection. In addition, several SEACEN countries

faced substantial current account deficits, which have put pressure on their exchange rates and on prices of financial assets in the recent years, which among others should be attributed to higher imports by the governments. Thus, the focus of fiscal adjustment should not be only on its size but also on its composition. Policy-makers therefore have to carefully consider which components of the budget can and should be adjusted, taking into account their likely impact on the other sectors of the economy.

## **1.2 Objectives of the Study**

The main objectives of this study are:

- (i) to briefly review the fiscal systems of the SEACEN countries,
- (ii) to determine the size of fiscal adjustment,
- (iii) to identify the main components of revenue and expenditure that have greater influence for the success of fiscal consolidation, and
- (iv) to assess the macroeconomic effects of fiscal consolidation in the SEACEN countries.

## **1.3 Scope and Limitations of the Study**

One may argue, not illogically, that the assessment of true effects of fiscal consolidation should be based on the overall activities of the public sector. However, this study will focus on the fiscal operations of the central government on account of two main reasons. Firstly, considering the dominance of the central government in terms of its size as a proportion of the public sector, as well as its monetary and economic impact on the economy, the analysis of this sector alone will provide a sufficiently clear picture of the fiscal consolidations and their impact. The government's ability to obtain credit from the central bank implies that its financial resource could be virtually unlimited and its actions

could have far-reaching implications on the entire economy.<sup>1</sup> In addition, the government has the power and responsibility towards macroeconomic stability. Secondly, the study also faced with the lack of comparable and reliable data of the fiscal operations of the public sector.

Even when the study is based on the central government, we still experienced difficulties in obtaining up-to-date, reliable and comparable data from the national sources. For example, apart from different classifications of expenditure, the functional breakdown for repayment of principals in several countries are not available whereas the inter-fund transactions are not entirely eliminated. Thus, for comparative-analysis purpose, most of the data are drawn from the Government Finance Statistics (GFS) of IMF which provides data based on relatively more similar definitions. Supplementary data and information are taken from the SEACEN Financial Statistics (SFS) and the national sources through both published sources and specific questionnaires to the member central banks. Data for Taiwan are obtained from the national sources through The Central Bank of China, Taipei. Due to the long time lag before data are available, the study period is up to 1996, or 1995 in some cases.

Data on the economic classification of government expenditure, the main requirement for the analysis of this study, are not available for Myanmar and Nepal. However, the exclusion of these countries was confined to the quantitative part of the study as efforts were made to assess the thrust of their fiscal policies basing on qualitative data.

Another problem faced was how to classify the item "Adjustments to Total Expenditure" in the government expenditure account in some SEACEN countries. Given the magnitude of such data, they can have significant impact on our interpretation and analysis, particularly with regard to the "capital expenditure" versus "current expenditure". Since we believe that data on current expenditure

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<sup>1</sup> International Monetary Fund (1986): *A Manual on Government Finance Statistics*, p. 12.

will have an inherently more smooth trend, data on the adjustments item are included in the capital spending.

#### **1.4 Organisation of the Paper**

The study is organised into six chapters. The first chapter provides an introduction to the study. Chapter two presents an overview of the fiscal policy and discusses the fiscal developments in the SEACEN countries since the mid-1970s. Chapter three describes the analytical approach of the study, including the methodology, sources of data, etc. Chapter four examines how tight and successful the fiscal consolidation of the SEACEN countries are, together with macroeconomic impact of such consolidation. A brief account of the role of the fiscal sector at the onset of the present economic turmoil is contained in chapter five. Lastly in chapter six, the conclusions and policy implications are discussed.

## Chapter 2

### OVERVIEW OF FISCAL SYSTEMS IN THE SEACEN COUNTRIES

#### 2.1 Introduction

Historically, most of the SEACEN countries have a long track record of prudent macroeconomic policies, with the fiscal deficits being maintained at levels well below those observed in other developing countries. Many of them have also been enjoying relatively high private saving rates, which have helped them avoid resorting to monetary financing of fiscal deficits.<sup>2</sup>

However, fiscal deficits in a majority of the SEACEN countries were rising rapidly during the first half of the 1980s. For example, Sri Lanka's average fiscal deficits exceeded one-tenth of the GDP during the first half of the 1980s. Similarly, the ratio in Malaysia was about one-tenth. The large fiscal deficits led to increasingly large and unsustainable government debts and difficulties in financing these deficits, resulting in the crowding-out of productive private investment and macroeconomic instability.

At the same time, most of the SEACEN governments recognised the importance of the private sector's role in spearheading the economic growth of a country, and implemented fundamental changes in economic policies. The role of fiscal policy was shifted towards the objectives of providing a more stable macroeconomic environment, encouraging stronger domestic saving and private investment through various market-oriented structural reforms. This new strategy required both greater discipline in fiscal operations and reducing the role of the government to ensure that state intervention does not impede private sector

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<sup>2</sup> See International Monetary Fund, *World Economic Outlook*, May 1996, p. 65.

development.<sup>3</sup> While the new policy strategy helped improve the fiscal positions considerably in some countries, the degree of achievements have been uneven across countries depending upon the existing stage of economic development, the availability of resources, political stability and above all policy commitments.

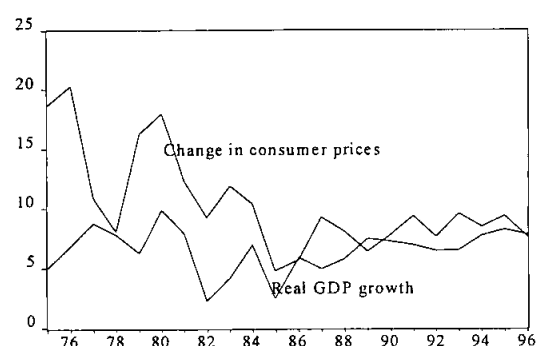
Fiscal developments of the SEACEN countries since the second half of 1970s are examined in the subsequent sections on the basis of the GFS's consolidated central government data. It is noted that cross-country comparison of government revenue is much less problematic than the expenditure. As mentioned earlier, detailed classification of government expenditure are not available in many countries. There are also difficulties in categorising the type of expenditure even in aggregate form such as regular and development expenditure. In some cases, a sizeable amount of routine type expenditure are classified as development expenditure.

## 2.2 Overall Economic Performance

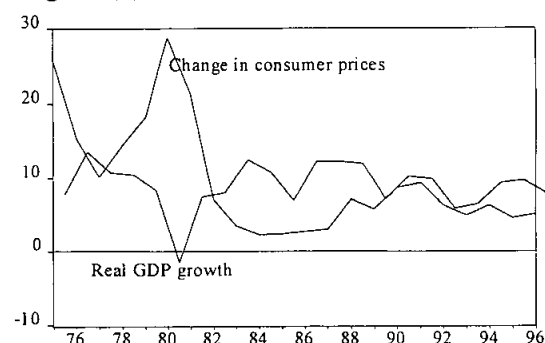
On the whole, the SEACEN region has been having a remarkable record of high growth with moderate rate of inflation. The annual economic growth of the region averaged at more than 6 percent during the last two decades (1976-96) and the average annual inflation, measured by changes in the consumer price index, was at 8.3 percent during the corresponding period.

**Figure 2.1**  
Growth and inflation

**Fig 2.1 (a): Indonesia**



**Fig 2.1 (b): Korea**



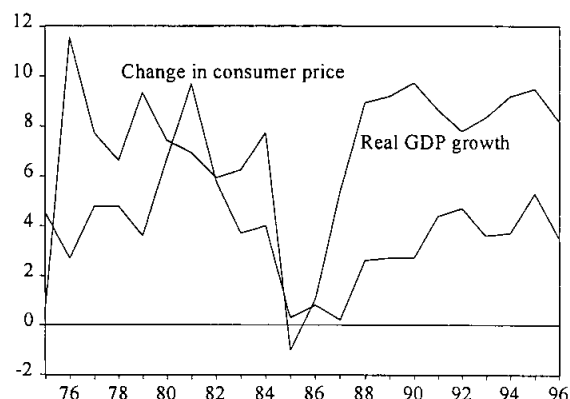
<sup>3</sup> Ibid, p. 63.



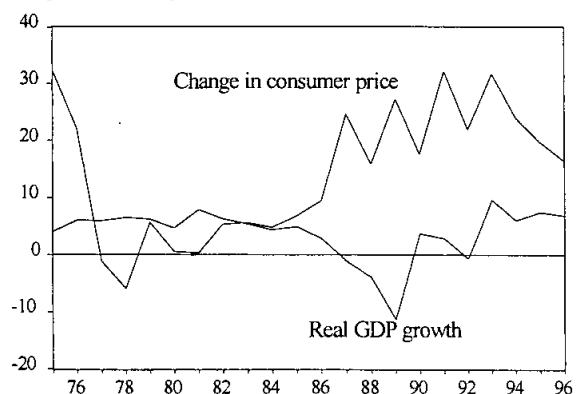
The growth and inflation of the fast growing economies of the region (Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand) have been even more impressive. Their combined annual average growth rate almost reached 8 percent with a modest inflation rate of about 6 percent.

The impressive run of high growth with low inflation suffered a setback in the early to mid-1980s when these economies were hit by global recession. Korea as well as Malaysia and Singapore experienced negative growth in 1980 and 1985, respectively. Indonesia, Taiwan and Thailand also recorded lower growth in 1985. The economic performance of Malaysia, Singapore and Thailand remained sluggish in 1986 before reviving in 1987, after a series of structural adjustment measures. Since then, these countries enjoyed a long period of phenomenon growth until they were hit by the Asian currency and financial crisis in mid-1997.

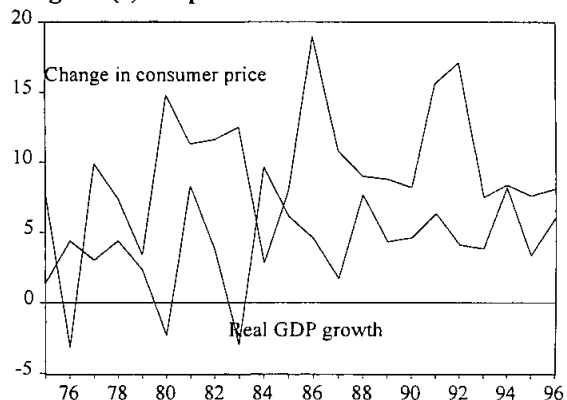
**Fig 2.1(c) :Malaysia**



**Fig 2.1 (d): Myanmar**



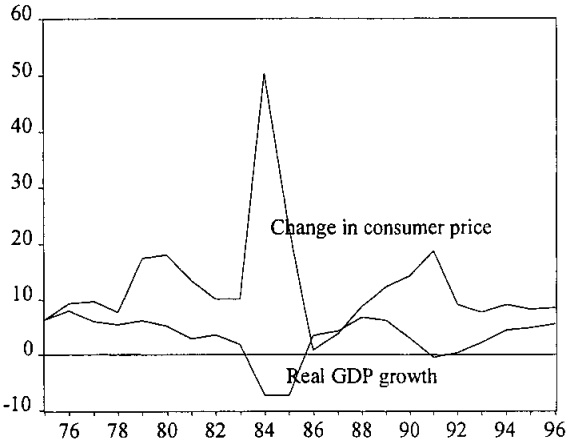
**Fig 2.1 (e): Nepal**



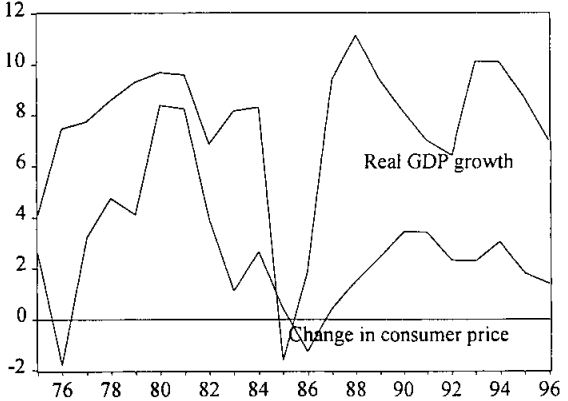
Despite a robust performance in the domestic front, all the countries in the region, excepting Singapore and Taiwan, were experiencing increasing external current account deficits, even though their fiscal performances have been improving significantly. In fact, several SEACEN countries had recorded fiscal surplus since the early 1990s. The rise in external current account deficits has been considered one of the main factors contributing to the financial crisis in 1997.

Compared with the high growth countries above, economic performance in Myanmar, Sri Lanka and Nepal were relatively modest. Apart from slower growth, inflation in these countries, with the exception of Nepal, showed a double-digit inflation during the last two decades on the average. The Philippines recorded more than 50 percent rise in its consumer price index in 1984, partly due to the adverse political development. The inflation in Nepal, though remained at single digit on average during the last two decades, had been rather volatile. In some years, for example in 1986, Nepal experienced about 20 percent rise in its consumer price index.

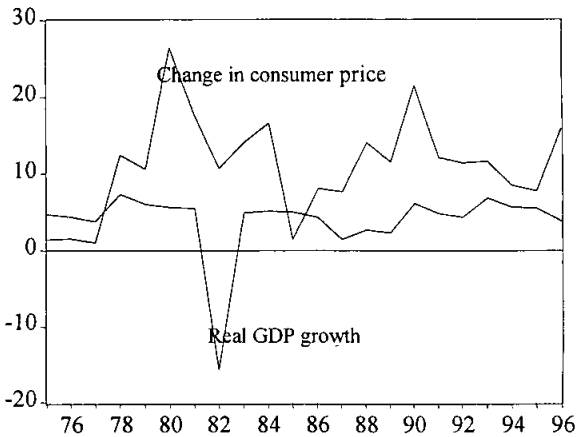
**Fig. 2.1 (f): Philippines**



**Fig. 2.1 (g): Singapore**

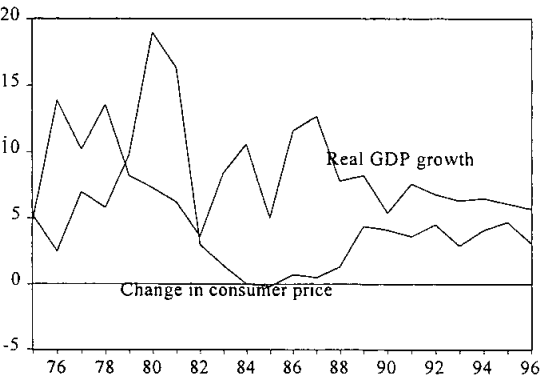


**Fig. 2.1 (h): Sri Lanka**

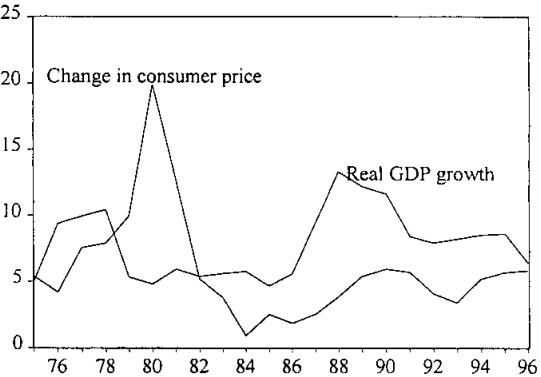


As shown in Figures 2.1(a) to 2.1(j) and Table 2.1, there seems to be an inverse relationship between growth and inflation. This seems to be the case in all the countries, including the high performing ones.

**Fig 2.1 (i): Taiwan**



**Fig 2.1 (j): Thailand**



**Table 2.1**  
**MAJOR ECONOMIC INDICATORS**

	1976-85 (Average)	1986-95 (Average)	1996	1976-96 (Average)
<b>Indonesia</b>				
Growth rate of real GDP	6.3	6.7	7.8	6.6
Changes in consumer price index	12.2	8.2	7.6	10.1
Current account balance of BOP (% of GDP)	-1.8	-2.7	-3.4	-2.3
<b>Korea</b>				
Growth rate of real GDP	8.0	8.8	7.1	8.3
Changes in consumer price index	12.4	5.8	5.0	8.9
Current account balance of BOP (% of GDP)	-3.3	1.3	-4.9	-1.2
<b>Malaysia</b>				
Growth rate of real GDP	6.9	7.8	8.2	7.4
Changes in consumer price index	4.6	3.1	3.5	3.8
Current account balance of BOP (% of GDP)	-2.9	-2.1	-5.2	-2.6
<b>Myanmar</b>				
Growth rate of real GDP	5.8	1.5	6.9	3.8
Changes in consumer price index	4.4	22.5	16.5	13.6
Current account balance of BOP (% of GDP)	-3.3	-0.9	-0.3	-2.2
<b>Nepal</b>				
Growth rate of real GDP	3.7	4.9	6.0	4.4
Changes in consumer price index	7.9	11.2	8.1	9.5
Current account balance of BOP (% of GDP)	-1.6	-5.9	-10.2	-4.1
<b>Philippines</b>				
Growth rate of real GDP	2.5	3.5	5.5	3.1
Changes in consumer price index	16.9	9.2	8.4	12.8
Current account balance of BOP (% of GDP)	-5.1	-2.7	-4.3	-3.9
<b>Singapore</b>				
Growth rate of real GDP	7.4	8.2	7.0	7.8
Changes in consumer price index	3.5	1.9	1.4	2.7
Current account balance of BOP (% of GDP)	-6.6	9.2	15.0	2.0
<b>Sri Lanka</b>				
Growth rate of real GDP	3.2	4.4	3.8	3.8
Changes in consumer price index	11.3	11.4	15.9	11.6
Current account balance of BOP (% of GDP)	-6.1	-5.0	-3.9	-5.5
<b>Taiwan</b>				
Growth rate of real GDP	8.7	7.9	5.7	8.2
Changes in consumer price index	6.5	3.1	3.1	4.7
Current account balance of BOP (% of GDP)	5.1	7.8	3.8	6.3
<b>Thailand</b>				
Growth rate of real GDP	6.7	9.4	6.4	8.0
Changes in consumer price index	7.4	4.3	5.8	5.9
Current account balance of BOP (% of GDP)	-5.3	-4.7	-7.9	-5.2
<b>Total ( average)</b>				
Growth rate of real GDP	5.9	6.3	6.4	6.1
Changes in consumer price index	8.7	8.1	7.5	8.3
Current account balance of BOP (% of GDP)	-3.1	-0.6	-2.1	-1.9

Sources: *International Finance Statistics Yearbook* (various issues), and *SEACEN Financial Statistics*, July 1997. Data for Taiwan are compiled from *ADB Key Indicators* and *Taiwan Statistical Data Book*.

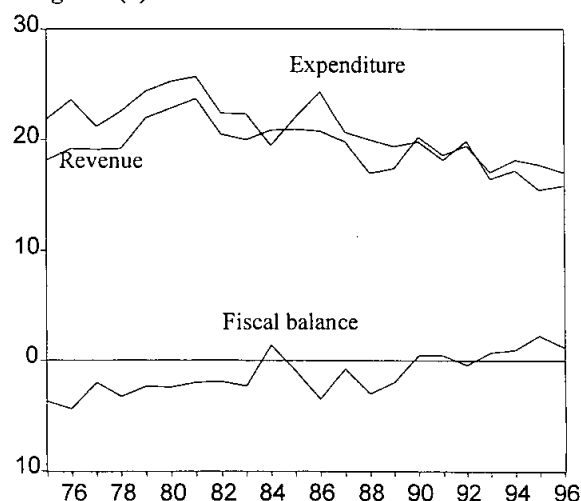
## 2.3 Fiscal Operations

Similar to other developing countries, many of the SEACEN countries recorded widening fiscal deficits during 1970s and early 1980s, largely as a result of faster growth in government spending than that in revenue.

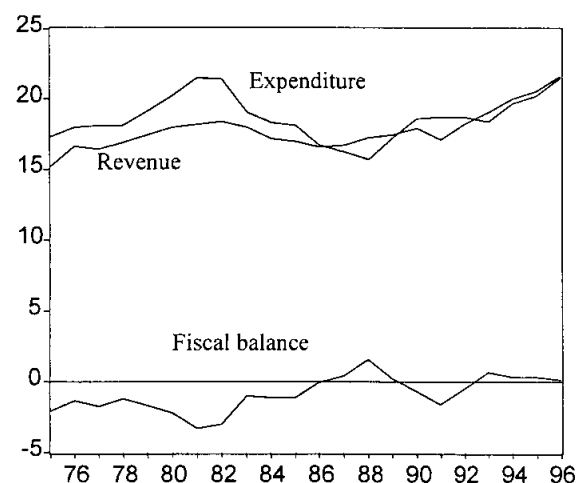
The substantial growth in public expenditure is attributed, among others, to increases in global interest rates, which raised the cost of servicing the large external debt, especially during the first half of 1980s. It is noted that the fiscal positions in the SEACEN countries worsened significantly during this period compared with the second half of 1970s, largely due to jumps in spending rather than shrinking revenue. The central government fiscal positions of many of the members worsened. The overall fiscal deficits of Malaysia climbed to an average of 9.9 percent of GDP during the period of 1981-85, from 5.9 percent during 1976-80 period. The fiscal balance of Korea, Myanmar, Nepal, Philippines and Thailand also deteriorated. However, Indonesia and Singapore's fiscal positions registered some improvements in the comparable period. For Indonesia, it was the combined effects of rise in revenues (mainly

**Figure 2.2**  
**Fiscal Operations**

**Fig. 2.2 (a): Indonesia**



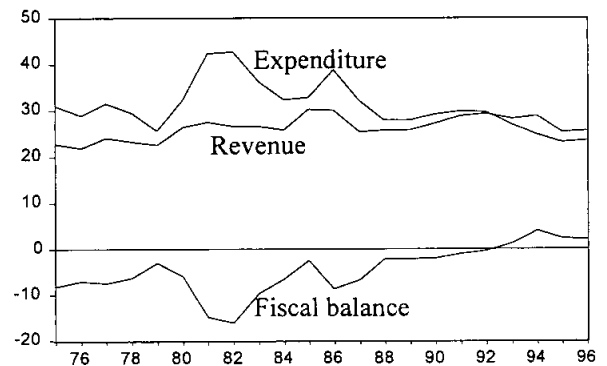
**Fig. 2.2 (b): Korea**



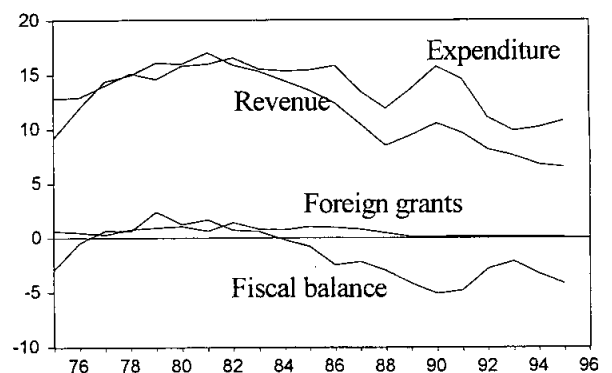
oil revenues) and fall in expenditures in proportion to GDP. In case of Singapore, it was the result of faster growth in revenue than expenditure. In spite of a moderate decline in fiscal deficits from 11.1 percent of GDP in the late 1970s to 10.7 percent in the early 1980s, Sri Lanka had the highest proportion of government deficits to GDP in the region.

As the fiscal situation continued to deteriorate, the SEACEN countries were forced to address the fiscal problems and initiated several measures to contain the budget deficits. The major steps in the expenditure front were to scale down the operating cost by freezing of positions and salaries of public servants, privatisation of some of the government enterprises or projects, directing the government investment towards more productive projects that can contribute to growth, repaying high interest-bearing external debt, etc. On the revenue front, a number of reforms were instituted in the taxation system. The most common measures were:

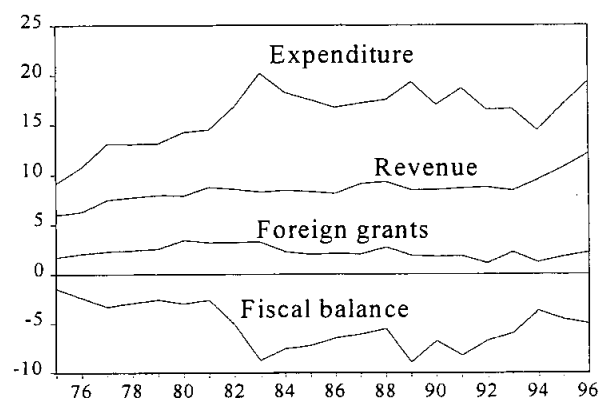
**Fig. 2.2 (c): Malaysia**



**Fig. 2.2 (d): Myanmar**



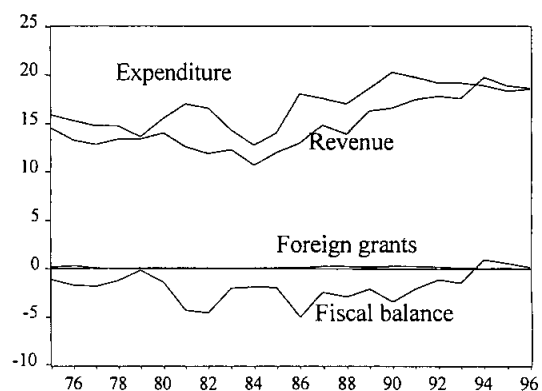
**Fig. 2.2 (e): Nepal**



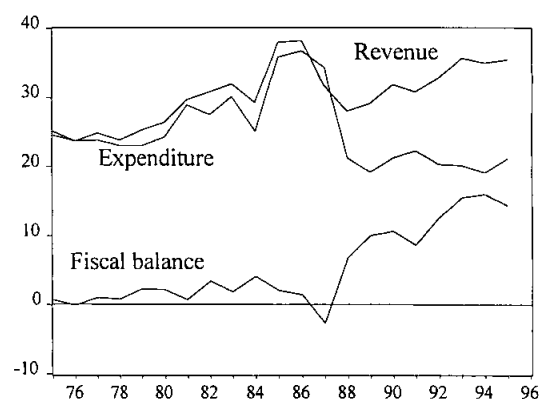
- ❖ improving tax administration;
- ❖ broadening personal and corporate tax bases;
- ❖ aligning the corporate rates with the top bracket of personal income tax rates;
- ❖ reducing exemptions and deductions in both personal and corporate tax and;
- ❖ rationalising the tax rates.

Some of the SEACEN countries were also moving towards consumption-based tax which is arguably more efficient. Korea and Indonesia introduced the value-added tax (VAT) as one of the important agenda of tax reform in 1977 and 1985, respectively. Similar tax was introduced in the rest of the SEACEN countries, with the exception of Malaysia.

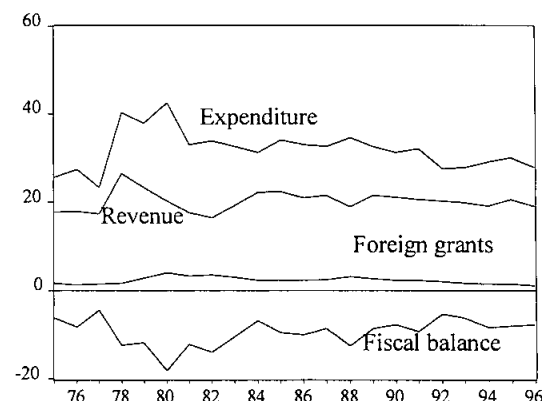
**Fig. 2.2 (f): Philippines**



**Fig. 2.2(g): Singapore**

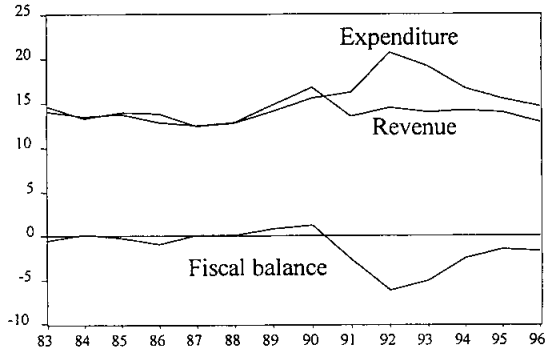


**Fig. 2.2 (h): Sri Lanka**

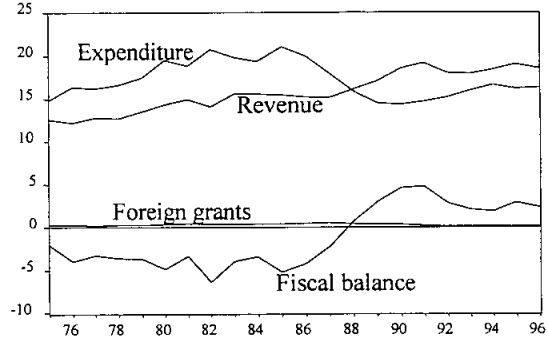


The above policy initiatives resulted in marked improvement in the fiscal position, though the degree of achievement remained uneven across the countries depending upon several factors, particularly policy commitments. Many of the members even succeeded in turning their fiscal deficit into surplus [see Table 2.2 and Figures 2.2(a) to 2.2(j)].

**Fig. 2.2 (i): Taiwan**



**Fig 2.2 (j): Thailand**





**Table 2.2**  
**FISCAL OPERATIONS OF THE SEACEN COUNTRIES**  
(as percent of GDP)

	1976-80 (Average)	1981-85 (Average)	1986-90 (Average)	1991-95 (Average)	1996
<b>Indonesia</b>					
Total revenue	20.5	21.2	19.0	18.2	17.1
Total expenditure	23.4	22.4	20.9	17.5	15.9
Overall balance	-2.9	-1.2	-1.8	0.8	1.2
<b>Korea</b>					
Total revenue	17.0	17.7	17.1	19.0	21.6
Total expenditure	18.7	19.6	16.9	19.1	21.5
Overall balance	-1.7	-1.9	0.3	-0.2	0.1
<b>Malaysia</b>					
Total revenue	23.6	27.3	26.8	28.2	25.6
Total expenditure	29.6	37.3	31.2	26.9	23.5
Overall balance	-5.9	-9.9	-4.4	1.3	2.1
<b>Myanmar</b>					
Total revenue	14.7	15.3	10.3	7.7	6.5*
Foreign grant	0.7	0.9	0.5	0.1	0.1*
Total expenditure	14.5	15.8	14.2	11.3	10.8*
Overall balance	0.9	0.4	-3.4	-3.5	-4.1*
<b>Nepal</b>					
Total revenue	7.4	8.4	8.7	9.2	12.1
Foreign grant	2.5	2.8	2.1	1.6	2.2
Total expenditure	12.8	17.5	17.6	16.6	19.3
Overall balance	-2.9	-6.3	-6.8	-5.9	-5.0
<b>Philippines</b>					
Total revenue	13.4	11.9	14.9	18.3	18.7
Foreign grant	0.1	0.1	0.2	0.1	0.0
Total expenditure	14.8	14.9	18.3	19.1	18.5
Overall balance	-1.3	-2.9	-3.2	-0.6	0.3
<b>Singapore</b>					
Total revenue	24.8	31.9	31.8	34.0	35.4*
Total expenditure	23.6	29.5	26.6	20.6	21.1*
Overall balance	1.2	2.4	5.2	13.4	14.3*
<b>Sri Lanka</b>					
Total revenue	20.9	19.5	20.7	20.0	19.0
Foreign grant	2.2	2.7	2.4	1.7	1.1
Total expenditure	34.2	32.9	32.7	29.3	27.9
Overall balance	-11.1	-10.7	-9.6	-7.6	-7.8
<b>Taiwan</b>					
Total revenue	n.a.	13.8	14.0	14.0	12.9
Total expenditure	n.a.	14.0	13.8	17.6	14.6
Overall balance	n.a.	-0.2	0.2	-3.6	-1.8
<b>Thailand</b>					
Total revenue	13.1	15.1	16.4	18.5	18.5
Foreign grant	0.2	0.4	0.4	0.1	0.1
Total expenditure	17.2	19.9	16.5	15.7	16.3
Overall balance	-3.9	-4.5	0.3	2.9	2.3

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

\* Denotes data for 1995.

Notes: 1. Figures of all the countries except the Philippines are consolidated central government, while those of the Philippines are budgetary central government.

2. For Taiwan, the figures shown in 1981-85 are the average of the three years (1983-85).

3. Components may not add up due to rounding.

### 2.3.1 *Revenue and Tax Structures*

#### 2.3.1a *Revenue Structure*

The revenue structures of the SEACEN countries are presented in Table 2.3. The total revenue as a proportion to GDP in most countries showed an increasing trend from 1976-1995, principally due to the remarkable rise in non-tax revenue. The ratios remained flat or declined slightly in 1996. However, the contribution of non-tax revenue to total revenue rose significantly partly as a result of privatisation receipts.

Total revenue for Myanmar, however, has been on a declining trend since 1985. Its total revenue to GDP ratio fell to 6.5 percent in 1996 from the annual average of 14.7 percent during 1976-80. Tax revenue which accounts for slightly over one-half of total revenue, declined steadily from 9.2 percent of GDP during 1981-85 to 3.8 percent in 1996. To some extent, this reflects its inadequate tax administration due to political and structural problems, as well as delay in adopting economic liberalisation policy. Even after implementing the liberalisation policy in 1988, the measures were not well co-ordinated.<sup>4</sup> Similarly, Indonesia experienced decline in total revenue collection since 1985 owing mainly to the sharp drop in oil companies' corporate revenue caused by the fall in oil prices as well as depletion of resources. Traditionally, a bulk of total revenue came from oil-related source and the oil price boom in the 1970s was the main reason for its buoyant government revenue at that time.<sup>5</sup> The government has tried to diversify its tax base and has initiated a number of measures to strengthen its non-oil tax base in the 1980s, including the restructuring of income taxation in 1984, introducing value-added tax in 1985, and reforming property taxation in 1986. These measures helped increase Indonesia's tax revenue

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<sup>4</sup> See *ASEAN Economic Bulletin*, Vol. 13, No. 3, March 1997.

<sup>5</sup> See Anwar Nasution (1989): 'Fiscal System and Practices in Indonesia' in *Fiscal Systems and Practices in ASEAN: Trends, Impact and Evaluation*, edited by Mukul G. Asher, pp. 24-25.

from 14.6 percent of GDP in 1986 to 19.1 percent in 1990. However, there has been little further progress since then.

**Table 2.3**  
**TAX AND NON-TAX REVENUES**

	1976-1980 (Average)		1981-1985 (Average)		1986-1990 (Average)		1991-1995 (Average)		1996	
	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	100.0	20.5	100.0	21.2	100.0	19.0	100.0	18.2	100.0	17.1
Tax revenue	93.2	19.1	87.5	18.5	84.3	16.0	88.9	16.2	86.6	14.8
Non-tax revenue	6.8	1.4	12.5	2.7	15.7	3.1	11.1	2.0	13.4	2.3
<b>Korea</b>	100.0	17.0	100.0	17.7	100.0	17.1	100.0	19.0	100.0	21.6
Tax revenue	89.2	15.2	86.9	15.4	88.2	15.1	86.1	16.3	85.9	18.6
Non-tax revenue	10.8	1.8	13.1	2.3	11.8	2.0	13.9	2.6	14.1	3.0
<b>Malaysia</b>	100.0	23.6	100.0	27.3	100.0	26.8	100.0	28.1	100.0	25.6
Tax revenue	90.1	21.3	81.4	22.2	69.7	18.7	74.7	20.9	80.2	20.5
Non-tax revenue	9.9	2.3	18.6	5.1	30.3	8.1	25.3	7.2	19.8	5.1
<b>Myanmar</b>	100.0	14.7	100.0	15.3	100.0	10.3	100.0	7.7	100.0*	6.5*
Tax revenue	67.3	9.8	60.1	9.2	55.4	5.7	60.5	4.7	57.4*	3.8*
Non-tax Revenue	32.7	4.9	39.9	6.1	44.6	4.5	39.5	3.1	42.6	2.8
<b>Nepal</b>	100.0	7.4	100.0	8.4	100.0	8.7	100.0	9.2	100.0	12.1
Tax revenue	83.8	6.2	84.6	7.1	80.8	7.0	80.6	7.4	84.1	10.2
Non-tax revenue	16.2	1.2	15.4	1.3	19.2	1.7	19.4	1.8	15.9	1.9
<b>Philippines</b>	100.0	13.4	100.0	11.9	100.0	14.9	100.0	18.3	100.0	18.7
Tax revenue	87.3	11.7	88.7	10.6	83.1	12.4	85.3	15.6	89.8	16.8
Non-tax revenue	12.7	1.7	11.3	1.3	16.9	2.5	14.7	2.7	10.2	1.9
<b>Singapore</b>	100.0	24.8	100.0	31.9	100.0	31.8	100.0	34.0	100.0*	35.4*
Tax revenue	67.7	16.8	58.7	18.5	46.6	14.6	49.0	16.6	45.7*	16.2*
Non-tax revenue	32.3	8.0	41.3	13.4	53.4	17.2	51.0	17.3	54.3*	19.2*
<b>Sri Lanka</b>	100.0	20.9	100.0	19.5	100.0	20.7	100.0	20.0	100.0	19.0
Tax revenue	92.3	19.4	88.2	17.1	86.3	17.9	88.8	17.7	89.0	16.9
Non-tax revenue	7.7	1.6	11.8	2.4	13.7	2.8	11.2	2.2	11.0	2.1
<b>Taiwan</b>	n.a	n.a	100.0	13.8	100.0	14.0	100.0	14.0	100.0	12.9
Tax revenue	n.a	n.a	70.9	9.8	70.2	9.9	74.0	10.4	76.4	9.8
Non-tax revenue	n.a	n.a	29.1	4.0	29.8	4.1	26.0	3.7	23.6	3.0
<b>Thailand</b>	100.0	13.1	100.0	15.1	100.0	16.4	100.0	18.5	100.0	18.5
Tax revenue	91.0	11.9	90.2	13.6	91.1	14.9	90.5	16.7	91.2	16.9
Non-tax revenue	9.0	1.2	9.8	1.5	8.9	1.5	9.5	1.8	8.8	1.6
<b>Total (average)</b>	100.0	17.3	100.0	18.2	100.0	18.0	100.0	18.7	100.0	18.8
Tax revenue	84.7	14.6	79.7	14.2	75.6	13.2	77.9	14.3	78.6	14.5
Non-tax revenue	15.3	2.7	20.3	4.0	24.4	4.7	22.1	4.4	21.4	4.3

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

A = As % of total revenue.

B = As % of GDP.

\* Denotes data for 1995.

Notes: 1. For Taiwan, the figures shown in 1981-85 are the average of three years (1983-85).

2. Total may not add up due to rounding.

Revenue mobilisation in Sri Lanka on the average remained about 20 percent of GDP throughout the period. Efforts to augment revenue collection have not been very fruitful. Tax revenue, which forms nearly 90 percent of total revenue on average, was flat during 1981-95, and dipped by nearly 1 percentage point in terms of GDP in 1996. A few reasons accounted for this trend. First, tax revenue in Sri Lanka has already been on the high side in terms of per capita income. Second, the persistent ethnic conflicts have been taking tolls on economic growth and hence revenue collections. Similarly, Taiwan's revenue performance has been rather stagnant at around 13-14 percent during the study period. In terms of per capita income, Taiwan's tax efforts are among the lowest in the region.

Largely due to strong economic growth, revenue performance of the rest of the members improved, considerably in some cases, particularly for Singapore, Thailand, the Philippines and Malaysia. The revenue to GDP ratio of Singapore that averaged at 24.8 percent during 1976-80 recorded a marked increase of 9.2 percentage points of GDP to average at 34.0 percent in 1991-95. In 1995, the ratio improved further to 35.4 percent. To a large extent, the increased total revenue was due to higher non-tax revenue, which jumped from 8.0 percent of GDP in 1976-80 to 19.2 percent in 1996. It is noted that the tax structure in Singapore has gone through a drastic change during the study period as non-tax revenue share in total revenue increased steadily to slightly more than 5.0 percent in 1996. This is partly explained by the rise in investment income resulting from continuous budget surplus, revenue from sales of land, and profits made by public entities, particularly the Monetary Authority of Singapore and the Board of Commissioners of Currency. Thailand also enjoyed a steady increase in total revenue collection in the review period with revenue to GDP rising from 13.1 percent during 1976-80 to 18.5 percent in 1991-95, an increase of 5.4 percentage points. In 1996, such ratio remained at 18.5 percent. The rising trend came nearly entirely from improved tax revenue. The Philippines' revenue collections also registered similar improvements, from an average of 13.4 percent of GDP during 1976-80 to 18.3 percent during 1991-95, an increase of 4.9 percentage

points. It went slightly higher to 18.7 percent of GDP in 1996. For the tax revenue, a drastic improvement has been observed since 1990 after the implementation of several measures and the improved economic performance. Malaysia, which has the second highest revenue to GDP ratio in the region, is another country that generally experienced a better revenue performance. Its revenue to GDP ratio rose to an average of 28.1 percent of GDP in 1991-95 from 23.6 percent in 1976-80, an increase of 4.5 percentage points. The rise was partly due to a jump in non-tax revenue from 2.3 percent of GDP to 7.2 percent during the period, mainly on account of privatisation receipts. On the other hand, tax revenue in proportion to GDP has registered a rather declining trend. Because of this, Malaysia's total revenue collections in proportion to GDP dropped down to 25.4 percent in 1995 and remained almost at the same level (25.6 percent) in 1996.

Revenue to GDP ratios of Korea and Nepal also improved, albeit at a slower pace. Korea's revenue collections that averaged at 17 percent of GDP during 1976-80 increased by 2 percentage points to 19 percent in 1991-95. The ratio rose higher to 21.6 percent in 1996, reflecting the extra efforts of Korea to increase its revenue in the recent years. Revenue performance of Nepal has also shown noticeable improvements in the recent years, thanks to the adoption of several tax reform measures. The total revenue to GDP ratio in Nepal, which averaged just at 7.4 percent of GDP during 1976-80, increased to average at 9.2 percent during 1991-95 and further to 12.1 percent in 1996.

### *2.3.1b Tax Structure*

Table 2.4 presents the sources of tax revenue classified into four broad categories, namely income tax, domestic taxes on goods and services, tax on international trade, and other taxes. It is notable that the SEACEN countries can be split in two categories, in terms of the main sources of tax revenue. Six SEACEN countries depend chiefly on taxes on domestic taxes on goods and services while income tax

**Table 2.4**  
**Tax Revenue by Broad Categories**

	1976-1980 (Average)		1981-1985 (Average)		1986-1990 (Average)		1991-1995 (Average)		1996		1976-1996 (Average)	
	A	B	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	100.0	19.1	100.0	18.5	100.0	16.0	100.0	16.2	100.0	14.8	100.0	17.3
Income tax	75.1	14.4	81.4	15.1	62.2	10.0	57.3	9.3	58.0	8.6	68.5	12.0
Dom. taxes on goods & servcs.	12.6	2.4	12.3	2.3	27.4	4.4	32.7	5.3	34.1	5.0	21.9	3.6
Taxes on int'l trade	10.5	2.0	4.6	0.9	7.5	1.2	5.8	0.9	3.7	0.5	6.9	1.2
Others	1.8	0.3	1.6	0.3	2.9	0.5	4.2	0.7	4.2	0.6	2.7	0.5
<b>Korea</b>	100.0	15.2	100.0	15.4	100.0	15.1	100.0	16.3	100.0	18.6	100.0	15.6
Income tax	27.7	4.2	26.9	4.1	34.2	5.2	36.0	5.9	33.3	6.2	31.3	4.9
Taxes on goods & services	48.9	7.4	50.9	7.8	41.6	6.3	38.2	6.2	38.0	7.0	44.6	6.9
Taxes on int'l trade	18.2	2.8	16.5	2.5	15.4	2.3	7.8	1.3	7.3	1.4	14.2	2.2
Others	5.1	0.8	5.7	0.9	8.8	1.3	17.9	2.9	21.4	4.0	10.0	1.6
<b>Malaysia</b>	100.0	21.3	100.0	22.2	100.0	18.7	100.0	20.9	100.0	20.5	100.0	20.8
Income tax	39.5	8.4	46.5	10.3	45.2	8.5	45.7	9.6	45.3	9.3	44.3	9.2
Taxes on goods & services	22.1	4.7	21.2	4.7	26.3	4.9	29.3	6.1	31.9	6.6	25.1	5.2
Taxes on int'l trade	36.1	7.7	29.1	6.4	24.3	4.5	19.0	4.0	14.7	3.0	26.5	5.5
Others	2.2	0.5	3.2	0.7	4.3	0.8	6.0	1.3	8.2	1.7	4.1	0.8
<b>Myanmar</b>	100.0	9.8	100.0	9.2	100.0	5.7	100.0	4.7	100.0	3.8*	100.0	7.4
Income tax	6.1	0.6	6.1	0.5	17.2	1.0	27.9	1.3	34.4*	1.3*	14.3	0.8
Taxes on goods & services	72.2	7.1	66.4	6.1	57.3	3.3	48.8	2.3	44.9*	1.7*	61.2	4.7
Taxes on int'l trade	21.7	2.1	27.5	2.5	25.4	1.4	23.3	1.1	20.7*	0.8*	24.5	1.8
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0*	0.0*	0.0	0.0
<b>Nepal</b>	100.0	6.2	100.0	7.1	100.0	7.0	100.0	7.4	100.0	10.2	100.0	7.1
Income tax	9.2	0.6	9.2	0.6	11.7	0.8	10.9	0.8	15.3	1.6	10.5	0.8
Taxes on goods & services	40.3	2.5	47.9	3.4	45.5	3.2	48.4	3.6	47.2	4.8	35.5	2.6
Taxes on int'l trade	38.6	2.4	34.4	2.5	36.0	2.5	34.7	2.6	33.2	3.4	35.8	2.5
Others	11.9	0.7	8.5	0.6	6.8	0.5	6.0	0.4	4.3	0.4	18.2	1.2
<b>Philippines</b>	100.0	11.7	100.0	10.6	100.0	12.4	100.0	15.6	100.0	16.8	100.0	12.8
Income tax	24.6	2.9	25.0	2.6	29.4	3.7	33.8	5.3	37.1	6.2	28.6	3.7
Taxes on goods & services	43.1	5.1	43.3	4.6	40.3	5.0	29.9	4.7	29.9	5.0	38.7	4.8
Taxes on int'l trade	28.9	3.4	28.5	3.0	26.8	3.4	32.0	5.0	28.5	4.8	29.0	3.7
Others	3.4	0.4	3.2	0.3	3.5	0.4	4.3	0.7	4.5	0.8	3.6	0.5
<b>Singapore</b>	100.0	16.8	100.0	18.5	100.0	14.6	100.0	16.6	100.0	16.1*	100.0	16.6
Income tax	45.8	7.7	48.8	9.1	41.2	6.0	44.1	7.3	41.5*	6.7*	45.0	7.5
Taxes on goods & services	22.4	3.8	21.1	3.9	31.0	4.5	28.9	4.8	32.9*	5.3*	25.8	4.2
Taxes on int'l trade	11.2	1.9	7.2	1.3	4.9	0.7	2.7	0.5	2.0*	0.3*	6.5	1.1
Others	20.5	3.4	22.9	4.2	22.8	3.3	24.2	4.0	23.7*	3.8*	22.6	3.8
<b>Sri Lanka</b>	100.0	19.4	100.0	17.1	100.0	17.9	100.0	17.7	100.0	16.9	100.0	18.0
Income tax	15.0	2.8	17.6	3.0	13.0	2.3	14.8	2.6	15.9	2.7	15.2	2.7
Taxes on goods & services	32.2	6.1	40.5	6.9	47.9	8.6	55.8	9.9	60.5	10.2	44.9	8.0
Taxes on int'l trade	51.2	10.2	40.0	6.9	34.7	6.2	24.9	4.4	19.6	3.3	36.8	6.7
Others	1.7	0.3	1.9	0.3	4.5	0.8	4.5	0.8	4.1	0.7	3.2	0.6
<b>Taiwan</b>	n.a	n.a	100.0	9.8	100.0	9.9	100.0	10.4	100.0	9.8	100.0	10.0
Income tax	n.a	n.a	30.9	3.0	36.6	3.7	40.3	4.2	46.7	4.6	37.4	3.8
Taxes on goods & services	n.a	n.a	37.5	3.7	32.3	3.1	34.7	3.6	33.3	3.3	34.3	3.4
Taxes on int'l trade	n.a	n.a	28.1	2.7	23.1	2.2	16.3	1.7	14.7	1.4	21.1	2.1
Others	n.a	n.a	3.5	0.3	7.9	0.9	8.8	0.9	5.3	0.5	7.1	0.8
<b>Thailand</b>	100.0	11.9	100.0	13.6	100.0	14.9	100.0	16.7	100.0	16.9	100.0	14.4
Income tax	19.0	2.3	22.0	3.0	22.7	3.4	31.3	5.2	35.0	5.9	24.3	3.6
Taxes on goods & services	50.7	6.0	51.9	7.1	50.8	7.6	44.8	7.5	44.8	7.6	49.3	7.1
Taxes on int'l trade	28.2	3.4	23.8	3.2	23.2	3.5	19.3	3.2	16.1	2.7	23.3	3.3
Others	2.1	0.3	2.3	0.3	3.3	0.5	4.6	0.8	4.1	0.7	3.1	0.5
<b>All countries average</b>	100.0	14.6	100.0	14.2	100.0	13.2	100.0	14.3	100.0	14.4	100.0	14.0
Income tax	29.1	4.9	31.4	5.1	31.3	4.4	34.2	5.2	36.2	5.3	31.9	4.9
Taxes on goods & services	38.3	5.0	39.3	5.0	40.1	5.1	39.1	5.4	39.7	5.7	38.1	5.1
Taxes on int'l trade	27.2	4.0	24.0	3.2	22.1	2.8	18.6	2.5	16.0	2.2	22.5	3.0
Others	5.4	0.7	5.3	0.8	6.5	0.9	8.1	1.2	8.0	1.3	7.5	1.0

Sources: Computed on the basis of data published in various issues of *Government Finance Statistics* of IMF and data supplied by member central banks and monetary authorities.

A = As percent of total tax revenue; B = As percent of GDP; and \* Denotes data for 1995.

Note: For Taiwan, the figures shown in 1981-85 period are the average of three years (1983-1985).

ranks as the highest source of income in the rest of the countries. With a few exceptions, the structure of tax revenue was somewhat constant during the review period. In terms of GDP, taxes on income and profit showed a mixed trend, with the ratio generally increased during the 1980s and early 1990s. A similar pattern is observed for domestic taxes on goods and services.

### Taxes on Income and Profits

Taxes on income and profits rank as the single most important source of tax income in Indonesia, Malaysia and Singapore as they account for nearly half of total tax revenue. To a lesser extent, this is also the case in Taiwan, where income tax share has been steadily rising to surpass taxes on goods and services in importance.

Among the SEACEN countries, Indonesia has the highest ratio of income tax, albeit at a declining trend, averaging 68.5 percent of total tax revenue during 1976-96. Reflecting the high dependence on oil revenue, the ratios declined steadily after a peak of 81.4 percent in 1981-85, to 58 percent in 1996. Even in this reduced share, more than one-fourth of tax revenues was from oil.<sup>6</sup>

The share of income tax in total tax revenue in Malaysia remained constant at about 45 percent during the study period. For Singapore, while the share remained high, it declined steadily from 58.8 percent during 1981-85 to 41.5 percent in 1986. To a large extent, this reflects the reduction in personal income tax as well as the corporate tax rates. In fact, the measures to cut income tax while focusing on consumption tax and improved tax collection were part of the fiscal reform measures in many SEACEN countries during the study period. This is in line with the international trend to rely less on direct tax and more on consumption-based tax such as value-added tax (VAT) which is more simple, has less loopholes and opportunities for rent-seeking, as well as wider tax base.

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<sup>6</sup> Calculated from *SEACEN Financial Statistics*, July 1997, p. 29.

### Taxes on Goods and Services

Domestic taxes on goods and services account for a bulk of total tax revenue in Korea, Myanmar, Nepal, Philippines, Sri Lanka and Thailand. In Indonesia, Malaysia and Singapore, this category of tax is also gaining importance as both its share in total revenue, and as a proportion of GDP, have been rising steadily. To a large extent, this is a consequence of government policy to rely more on consumption-based tax such as value-added tax.

For the Philippines, while the amount of taxes on goods and services remained constant in the range of 4.6 percent - 5.1 percent of GDP, its importance as the main source of revenue has declined. As at 1996, its proportion in total revenue was only around 30 percent, compared with 37 percent share of income tax. Similarly, Taiwan also recorded a lower share of taxes on goods and services in 1996, when the share of income tax grew to around 47 percent of total revenue.

### Taxes on International Trade

Taxes on international trade ranks as the third most important source of revenue in the SEACEN countries, except for Singapore. However, the trade liberalisation efforts in support of the export-led growth strategy resulted in a general downward trend of import duties in the later part of the review period. Consequently, taxes on international trade have been showing a declining trend in most SEACEN countries. Though the revenue significance of this category has been negligible for some countries (for example Indonesia, Korea and Singapore), it is still occupying a respectable third position for many countries in the region because of substantial rise in the revenue base (trade volume) due to lower duty structures as well as removal of non-tariff barriers such as quantitative restrictions in line with the trade liberalisation policy.



Among the SEACEN countries, Nepal and Sri Lanka have the highest share of taxes on international trade, averaging more than one-third of total revenue during 1976-96. In fact, this tax is the second most important tax in Sri Lanka, behind taxes on goods and services. However, compared to 1976-80, it is declining dramatically, both in terms of total revenue and GDP. In 1996, the share in total revenue was only about 20 percent, down from 51 percent in 1976-80. Similarly, the share of this tax in total tax revenue in Korea declined to 7.3 percent in 1996, compared with 18.2 percent in 1976-80. This was mainly due to sharp cuts in duty structure. The average tariff rates of Korea, which were at 31.3 percent in 1975, were reduced to 11.4 percent in 1990 and further to 7.9 percent in 1994. For Indonesia, however, the small collection of taxes on international trade reflects its relatively more widespread use of non-tariff barriers, though there have been some attempts to reduce the scope of such quantitative restrictions since 1986.<sup>7</sup>

### Others

On the average, the share of this tax in total tax revenue in the SEACEN region is just 6.5 percent (1 percent of GDP) during 1976-96. However, in the recent years, the share of this category is increasing both as a proportion of total tax revenues as well as GDP, especially since mid-1980s. The increase is most striking in the case of Korea, where its proportion to total tax revenue rose to 21.4 percent in 1996, surpassing taxes on international trade as the third most important category. The sharp jump is partly explained by faster growth in social security contribution and property taxes (which include estate, inheritance, and gift tax; and taxes on capital and financial transactions) in the recent years. Thus, Korea joins Singapore as the two countries in the SEACEN region to have significant tax collection from property and other taxes. Singapore has been levying property taxes effectively resulting in a high share of 'other taxes' in total revenue above 20 percent throughout the study period. Malaysia also recorded a steady increase in 'other taxes' due to the same

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<sup>7</sup> Anwar Nasution, op. cit., pp. 36-37.

reason, i.e., increases in social security contribution and property taxes. Despite the increasing importance of this category in the recent years, its contribution in total tax is still minimal for the other countries in the region, suggesting that there is much more scope to raise revenue from this source, especially if property tax is implemented effectively.

### 2.3.2 *Expenditure Structure*

As mentioned earlier, the analysis of government expenditure was constrained to some extent by some limitations on data. The regional analysis of expenditure by broad category of current and capital expenditure excludes Nepal due to the unavailability of data. For the same reason, analysis of current expenditure by economic classification does not include Myanmar. There are also gaps in such data for some of the countries in some periods. The other limitation is the comparability of data across countries. Even though most of the data are taken from the same source (Government Finance Statistics), one should still be careful in comparing the "current" and "capital" expenditure among the countries as the definition could differ from one country to the other.

As shown in Table 2.5, total expenditure in the SEACEN countries grew rapidly in the 1970s mainly on account of expanded government activities, a hike in oil price and a steep rise in international interest rates. Among the SEACEN countries, expenditure to GDP ratio in Malaysia increased from 29.6 percent during 1976-80 to 37.3 percent, a rise of nearly 8 percentage points. Singapore also registered a rise of nearly 6 percentage points during the similar period. For Sri Lanka, even though total expenditure declined somewhat, it remained high at above 30 percent of GDP. For the other SEACEN countries, the increase in expenditure was relatively more moderate.

Table 2.5

## GOVERNMENT EXPENDITURE BY TYPE

	1976-1980 (Average)		1981-1985 (Average)		1986-1990 (Average)		1991-1995 (Average)		1996	
	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	100.0	23.4	100.0	22.4	100.0	20.9	100.0	17.5	100.0	15.9
Current expenditure	50.5	11.8	50.4	11.2	53.7	11.2	50.1	8.7	54.9	8.7
Capital expenditure	49.5	11.6	49.6	11.2	46.3	9.7	49.9	8.7	45.1	7.2
Of which lending min. repayment	6.7	1.6	4.0	0.9	-0.3	-0.1	1.9	0.3	7.3	1.2
<b>Korea</b>	100.0	18.7	100.0	19.6	100.0	16.9	100.0	19.1	100.0	21.5
Current expenditure	71.9	13.4	73.5	14.4	78.3	13.2	75.8	14.5	67.0	14.4
Capital expenditure	28.1	5.3	26.5	5.2	21.7	3.7	24.2	4.6	33.0	7.1
Of which lending min. repayment	13.0	2.4	13.7	2.7	8.0	1.4	10.4	2.0	13.4	2.9
<b>Malaysia</b>	100.0	29.6	100.0	37.3	100.0	31.2	100.0	26.9	100.0	23.5
Current expenditure	68.5	20.2	65.5	24.1	82.3	25.5	79.5	21.4	78.0	18.3
Capital expenditure	31.5	9.4	34.5	13.2	17.7	5.7	20.5	5.5	22.0	5.2
Of which lending min. repayment	12.1	3.6	12.7	4.7	2.7	1.1	1.5	0.4	4.3	1.0
<b>Myanmar</b>	100.0	14.5	100.0	15.8	100.0	14.2	100.0	11.3	100.0	10.8*
Current expenditure	81.7	11.8	75.8	12.0	77.5	10.9	61.4	7.0	50.7*	5.5*
Capital expenditure	18.3	2.7	24.2	3.8	22.5	3.2	38.6	4.3	49.2*	5.3*
Of which lending min. repayment	0.1	0.0	-2.9	-0.5	-3.1	-0.4	-0.3	-0.0	0.3*	0.0*
<b>Philippines</b>	100.0	14.8	100.0	14.9	100.0	18.3	100.0	19.1	100.0	18.4*
Current expenditure	72.3	10.7	62.4	9.2	78.2	14.3	81.7	15.6	82.6*	15.2*
Capital expenditure	27.7	4.1	37.6	5.7	21.8	4.0	18.3	3.5	17.4*	3.2*
Of which lending min. repayment	11.5	1.7	19.5	2.9	9.3	1.7	1.8	0.3	2.4*	0.4*
<b>Singapore</b>	100.0	23.6	100.0	29.5	100.0	26.6	100.0	20.6	100.0	21.1*
Current expenditure	67.2	15.8	62.2	18.1	68.1	17.3	66.2	13.7	58.0*	12.3*
Capital expenditure	32.8	7.7	37.8	11.4	31.9	9.3	33.8	6.9	42.0*	8.9*
Of which lending min. repayment	15.5	3.6	17.4	5.4	-0.4	0.6	14.8	3.0	24.9*	5.3*
<b>Sri Lanka</b>	100.0	34.2	100.0	32.9	100.0	32.7	100.0	29.3	100.0	27.9
Current expenditure	66.7	22.5	54.6	18.0	64.1	20.9	74.4	21.8	79.5	22.2
Capital expenditure	33.3	11.8	45.4	14.9	35.9	11.8	25.6	7.5	20.5	5.7
Of which lending min. repayment	2.2	0.8	4.0	1.3	5.9	1.9	4.4	1.3	1.9	0.5
<b>Taiwan</b>	n.a	n.a	100.0	14.0	100.0	13.8	100.0	17.6	100.0	14.6
Current expenditure	n.a	n.a	78.1	10.9	74.1	10.1	66.4	11.7	76.0	11.1
Capital expenditure	n.a	n.a	21.9	3.1	25.9	3.6	33.6	6.0	24.0	3.5
Of which lending min. repayment	n.a	n.a	0.0	0.0	2.1	0.3	3.6	0.6	1.9	0.3
<b>Thailand</b>	100.0	17.2	100.0	19.9	100.0	16.5	100.0	15.7	100.0	16.3
Current expenditure	73.7	12.7	78.8	15.7	81.7	13.4	70.8	11.1	63.1	10.3
Capital expenditure	26.3	4.5	21.2	4.2	18.3	3.0	29.2	4.6	36.9	6.0
Of which lending min. repayment	2.1	0.4	1.0	0.2	2.2	0.4	0.9	0.1	1.3	0.2
<b>Total (average)</b>	100.0	22.0	100.0	22.9	100.0	21.2	100.0	19.7	100.0	18.9
Current expenditure	69.1	14.9	66.8	14.8	73.1	15.2	69.6	13.9	67.8	13.1
Capital expenditure	30.9	7.1	33.2	8.1	26.9	6.0	30.4	5.7	32.2	5.8
Of which lending min. repayment	7.9	1.8	7.7	2.0	2.9	0.8	4.3	0.9	6.4	1.3

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

A = Percent of total expenditures.

B = Percent of GDP.

\* Denotes data for 1995.

Notes: 1. For Taiwan, the figures shown in 1981-85 are the three years average (1983-85).

2. Components may not add up due to rounding.

The period after 1980-85 saw a steady declining government spending in all the SEACEN countries, except for Philippines, Taiwan and to a lesser extent Korea. Again, the dramatic slowdown was recorded in Malaysia as average expenditure fell from 37.3 percent in 1980-85 to 26.9 percent in 1996. Similarly in Indonesia and Myanmar, government spending was reduced respectively to 17.5 percent and 11.3 percent in 1996, compared with 22.4 percent and 15.8 percent in 1980-85. This trend reflects the fiscal adjustment efforts by the SEACEN governments to overcome the high fiscal deficits experienced in the early 1980s. On the other hand, government expenditure to GDP ratios in Philippines and Taiwan, and to lesser extent Korea, the total spending increased during the similar period although the ratios were still well below those in Malaysia, Sri Lanka and Singapore.

For the SEACEN region as a whole, the cut in government spending was mostly felt in the capital spending. Current expenditure to GDP ratio, on the other hand, fell by only 1.7 percentage points to stand at 13.1 percent in 1996, compared with 14.8 percent in the 1981-85 period. The corresponding proportion of capital expenditure decreased by 2.3 percentage points to 5.8 percent of GDP in 1996. Thus, not only was the level of budget allocated to capital spending relatively much lower than the current spending, its rate of decline had also been much faster during the review period.

Malaysia's government spending in proportion to GDP came down to 23.5 percent of GDP in 1996 from the staggering level of more than 37 percent during 1980-85. Though this has been achieved by curtailing both the current and the capital spending, the proportionate cuts in capital spending are much higher. The current expenditure to GDP ratio decreased by 5.8 percentage points to 18.3 percent between 1981-85 and 1996, whereas such ratio for capital spending dropped by 8.0 percentage points to 5.2 percent. Consequently, the proportion of capital to total spending dropped to 22 percent in 1996 from 34.5 percent during 1981-85. Similarly, Singapore

was the second largest adjuster as its government spending fell to 21.1 percent of GDP in 1995 from the annual average of 29.5 percent during 1981-85, although the larger cut was felt in current spending. In fact, the share of capital spending in total expenditure increased to 42 percent in 1995 as compared to the average share of about 38 percent during 1981-85. Government spending to GDP ratio in Indonesia also recorded a large decline from 22.4 percent during 1981-85 to 15.9 percent in 1996, reflecting a fall in capital spending to GDP ratio by 4 percentage points and current spending to GDP ratio by 2.5 percentage points. Myanmar, Sri Lanka and Thailand also curtailed their spending in proportion to the GDP. However, the case of Sri Lanka is quite different in comparison to Myanmar and Thailand, the two countries which succeeded in containing their expenditure in proportion to GDP even by raising capital. Sri Lanka cut down its spending to 27.9 percent of GDP in 1996 from 32.9 percent during 1981-85 solely by curtailing capital expenditure as the capital expenditure to GDP ratio dropped sharply by 9.2 percentage points to 5.7 percent of GDP in 1996 from 14.9 percent during 1981-85. The corresponding proportion of current expenditure, on the other hand, registered a rise of 4.2 percentage points to 22.2 percent in 1996.

As mentioned earlier, the government spending of Korea, the Philippines and Taiwan paints a different picture. The expansionary fiscal policy of Korea during the early 1980s resulted in a continuous rise in government spending leading the authorities to shift policy priority from growth to economic stability. Reflecting mainly contractionary fiscal policy, government spending to GDP ratio fell on the average of 16.9 percent during 1986-90, as against 19.6 percent during 1981-85. Though this was the result of cuts in both components of spending, the major burden was borne by capital spending. Nonetheless, in the 1990s, government spending began to expand again, reaching 21.5 percent of GDP in 1996, even higher than the average proportion witnessed during 1981-85. The rebound in spending in the 1990s is attributed to the policy initiatives undertaken by the government to overcome the infrastructure

bottlenecks arising partly from the contractionary fiscal policy adopted during 1980s as well as increasing demand for social welfare services in the recent years.

Government spending of the Philippines was less than one-sixth of GDP till mid-1980s, the second lowest proportion in the region (higher than only Taiwan). The spending started increasing since then to an average of about one-fifth of GDP during 1991-95, mainly as a result of a sharp rise in current spending while the proportion of capital spending is decreasing. The major factors accounting for such an increase were interest payment which jumped from a ratio of 2.6 percent in 1985 to 6.6 percent in 1990; and wages and salaries from 3.8 percent to 5.8 percent. After 1990, the spending proportion has been either declining or at least stabilising as interest payments as proportion to GDP dropped to 3.8 of GDP in 1995 partly as a result of stabilisation in nominal interest rates and faster growth in GDP.

Government spending to GDP ratio of Taiwan also kept on increasing till the early 1990s and peaked at 20.7 percent in 1992 from the average level of 14 percent during 1983-85. This is attributed to increases in both the current and the capital spending--particularly capital spending. However, the spending proportion began to decline since 1992 mainly due to substantial cuts in capital spending, probably reflecting fiscal restraint.

### ***2.3.2a Current Expenditure by Broad Categories***

An analysis of the different components of current expenditure, on the basis of Table 2.6, shows that wages and salaries dominate the expenditure structure of Malaysia, the Philippines, Singapore, Taiwan and Thailand, while subsidies and current transfers dominate the current expenditures of Indonesia, Korea and Sri Lanka. In proportion to total current expenditure, Taiwan's spending in wages and salaries is the highest in the region as almost half (46 percent) of its current expenditures were attributed to wages and salaries during 1976-96. In terms of GDP share,

**Table 2.6**  
**CURRENT EXPENDITURE BY BROAD CATEGORIES**

	1976-1980 (Average)		1981-1985 (Average)		1986-1990 (Average)		1991-1995 (Average)		1996		1976-1996 (Average)	
	A	B	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	<b>100.0</b>	<b>11.8</b>	<b>100.0</b>	<b>11.2</b>	<b>100.0</b>	<b>11.2</b>	<b>100.0</b>	<b>8.7</b>	<b>100.0</b>	<b>8.7</b>	<b>100.0</b>	<b>10.6</b>
Wages and salaries	29.4	3.5	25.6	2.9	28.3	3.2	30.3	2.7	27.6	2.4	28.3	3.0
Subsidies and other current transfers	36.5	4.3	42.1	4.7	31.8	3.6	28.3	2.5	35.3	3.1	34.7	3.8
Other purchase of goods & services	26.6	3.1	20.2	2.3	15.0	1.7	19.5	1.7	23.2	2.0	20.5	2.2
Interest payment	7.5	0.9	12.1	1.4	25.0	2.8	21.9	1.9	13.9	1.2	16.5	1.7
<b>Korea</b>	<b>100.0</b>	<b>13.4</b>	<b>100.0</b>	<b>14.4</b>	<b>100.0</b>	<b>13.2</b>	<b>100.0</b>	<b>14.5</b>	<b>100.0</b>	<b>14.4</b>	<b>100.0</b>	<b>13.9</b>
Wages and salaries	19.2	2.6	17.7	2.6	15.5	2.0	15.5	2.2	16.6	2.4	17.0	2.4
Subsidies & other current transfers	38.6	5.2	42.3	6.1	49.3	6.5	58.6	8.5	61.6	8.9	47.9	6.7
Other purchase of goods & services	36.0	4.8	31.9	4.6	28.7	3.8	21.9	3.2	17.8	2.6	29.0	4.0
Interest payment	6.3	0.8	8.1	1.2	6.6	0.9	4.0	0.6	4.0	0.6	6.1	0.8
<b>Malaysia</b>	<b>100.0</b>	<b>20.2</b>	<b>100.0</b>	<b>24.1</b>	<b>100.0</b>	<b>25.5</b>	<b>100.0</b>	<b>21.4</b>	<b>100.0</b>	<b>18.3</b>	<b>100.0</b>	<b>22.6</b>
Wages and salaries	44.4	9.0	37.3	9.0	36.6	9.4	33.8	7.2	35.9	6.6	37.9	8.5
Subsidies and other current transfers	24.2	4.8	23.2	5.6	17.6	4.4	24.8	5.3	29.6	5.4	22.8	5.1
Other purchase of goods & services	17.2	3.5	18.8	4.6	18.6	4.8	21.2	4.5	19.2	3.5	19.0	4.3
Interest payment	14.3	2.9	20.6	5.0	27.3	6.9	20.2	4.4	15.3	2.8	20.4	4.7
<b>Philippines</b>	<b>100.0</b>	<b>10.7</b>	<b>100.0</b>	<b>9.2</b>	<b>100.0</b>	<b>14.3</b>	<b>100.0</b>	<b>15.6</b>	<b>100.0*</b>	<b>15.2*</b>	<b>100.0</b>	<b>12.5</b>
Wages and salaries	34.6	3.7	36.9	3.4	35.0	5.0	35.5	5.5	37.7*	5.7*	35.5	4.4
Subsidies and other current transfers	11.5	1.3	9.7	0.9	7.1	1.0	15.1	2.3	20.9*	3.2*	10.9	1.4
Other purchase of goods & services	46.9	5.0	36.1	3.3	20.4	2.9	16.7	2.6	16.2*	2.5*	30.0	3.5
Interest payment	6.9	0.7	17.3	1.6	37.5	5.4	32.8	5.1	25.1*	3.8*	23.6	3.2
<b>Singapore</b>	<b>100.0</b>	<b>15.8</b>	<b>100.0</b>	<b>18.1</b>	<b>100.0</b>	<b>17.3</b>	<b>100.0</b>	<b>13.7</b>	<b>100.0*</b>	<b>12.3*</b>	<b>100.0</b>	<b>16.2</b>
Wages and salaries	39.3	6.2	37.5	6.8	36.3	6.2	36.8	5.0	38.7*	4.7*	37.5	6.0
Subsidies and other current transfers	6.1	1.0	7.4	1.3	13.9	2.4	16.4	2.3	14.9*	1.8*	10.9	1.7
Other purchase of goods & services	37.0	5.9	35.6	6.4	27.8	4.7	33.8	4.6	38.2*	4.7*	33.5	5.4
Interest payment	17.6	2.8	19.6	3.5	22.1	4.0	13.0	1.9	8.2*	1.0*	18.1	3.1
<b>Sri Lanka</b>	<b>100.0</b>	<b>22.5</b>	<b>100.0</b>	<b>18.0</b>	<b>100.0</b>	<b>20.9</b>	<b>100.0</b>	<b>21.8</b>	<b>100.0</b>	<b>22.2</b>	<b>100.0</b>	<b>20.9</b>
Wages and salaries	23.0	5.0	23.0	4.1	22.6	4.7	23.2	5.0	22.5	5.0	22.9	4.7
Subsidies and other current transfers	40.3	9.1	34.5	6.2	28.9	6.0	27.5	6.0	27.4	6.1	32.5	6.8
Other purchase of goods & services	22.7	5.3	15.8	2.9	22.0	4.6	21.5	4.7	23.1	5.1	20.6	4.4
Interest payment	14.0	3.1	26.7	4.8	26.6	5.6	27.7	6.0	27.0	6.0	23.9	4.9
<b>Taiwan</b>	<b>n.a.</b>	<b>n.a.</b>	<b>100.0</b>	<b>10.9</b>	<b>100.0</b>	<b>10.1</b>	<b>100.0</b>	<b>11.7</b>	<b>100.0</b>	<b>11.1</b>	<b>100.0</b>	<b>10.9</b>
Wages and salaries	n.a.	n.a.	50.8	5.5	46.8	4.8	44.6	5.2	31.2	3.5	45.8	5.0
Subsidies and other current transfers	n.a.	n.a.	6.6	0.7	17.6	1.8	24.1	2.8	18.3	2.0	17.6	2.0
Other purchase of goods & services	n.a.	n.a.	41.1	4.5	33.7	3.4	26.1	3.0	42.1	4.7	33.2	3.6
Interest payment	n.a.	n.a.	1.5	0.2	1.9	0.2	5.2	0.6	8.4	0.9	3.5	0.4
<b>Thailand</b>	<b>100.0</b>	<b>12.7</b>	<b>100.0</b>	<b>15.7</b>	<b>100.0</b>	<b>13.4</b>	<b>100.0</b>	<b>11.1</b>	<b>100.0</b>	<b>10.3</b>	<b>100.0</b>	<b>13.1</b>
Wages and salaries	29.3	3.7	36.7	5.8	38.8	5.2	45.0	5.0	46.9	4.8	37.9	4.9
Subsidies and other current transfer	19.5	2.5	9.8	1.5	9.7	1.3	10.5	1.2	11.2	1.2	12.3	1.6
Other purchase of goods & services	41.9	5.3	38.7	6.1	32.7	4.4	37.0	4.1	39.8	4.1	37.7	4.9
Interest payment	9.3	1.2	14.7	2.3	18.8	2.5	7.5	0.8	2.1	0.2	12.1	1.7
<b>Total (average)</b>	<b>100.0</b>	<b>15.3</b>	<b>100.0</b>	<b>15.2</b>	<b>100.0</b>	<b>15.8</b>	<b>100.0</b>	<b>14.8</b>	<b>100.0</b>	<b>14.1</b>	<b>100.0</b>	<b>15.1</b>
Wages and salaries	31.3	4.8	33.2	5.0	32.5	5.1	33.1	4.7	32.1	4.4	32.9	4.9
Subsidies and other current transfers	25.2	4.0	22.0	3.4	22.0	3.4	25.7	3.9	27.4	4.0	23.7	3.6
Other purchase of goods & services	29.9	4.7	28.8	4.3	26.1	3.8	25.0	3.5	27.5	3.7	27.9	4.0
Interest payment	13.6	1.8	16.1	2.5	19.5	3.5	16.2	2.7	13.0	2.1	15.5	2.6

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

A = As proportion to total current expenditures.

B = As proportion to GDP.

\* Denotes data for 1995.

Notes: 1. For Taiwan, the figures shown in 1981-85 period are the average of three years (1983-85)..

2. Components may not add up total due to rounding.

however, Malaysia's spending in this component is the highest. On the average, Malaysia spent 8.5 percent of GDP in wages and salaries during the corresponding period, followed by Singapore (6 percent), Taiwan (5.0 percent) and Thailand (4.9 percent). At the other end, the proportion of this category of spending to GDP was stable at around 2.4 percent during the period.

Looking at the trend, however, Malaysia had managed to scale down its wage and salary bill to GDP from the peak of 9.4 percent in 1986-90 to 6.6 percent in 1996. This was achieved by consolidating the workforce in the public sector (except for essential services including education and health) as well as privatisation of some of the government agencies and projects. Viewed from the prevailing salary structure along with the level of economic development and the size of the population as compared to other countries in the region, there is a possibility to further consolidate this type of spending in Malaysia. Similarly, a cutback on wages and salaries was observed in other countries, except the Philippines and Sri Lanka.

As stated above, subsidies and other current transfers dominate current expenditure of Indonesia, Korea and Sri Lanka. For Korea, almost half of its total current expenditure was spent on subsidies and current transfers during 1976-96. Similar proportion for Indonesia and Sri Lanka was roughly about one-third of total spending. Though for Indonesia and Sri Lanka, the proportion of such spending shows a declining trend since 1976 due to their concerted efforts to gradually phase out subsidies in line with the liberalisation of economic policy, for Korea such proportion continued to increase to reach nearly two-thirds of total spending or 8.9 percent of GDP in 1996. Such an increase is attributed to increasing transfers to non-profit institutions and household, reflecting new or expanded number of social security measures including unemployment insurance, transfer to low income groups, etc., in the recent years. In addition, there was also a rise in transfer to other local governments. In the Philippines too, spending on subsidies and current



transfers is noticeably increasing in 1995 largely due to the growing mandated transfers to local government as legislated by the Philippine Congress in 1991 that, by 1994, transfer to local government units would be 40 percent of internal revenue (tax revenue excluding international trade taxes) that had been collected by the national government over the past three years.<sup>8</sup>

On the average, the region's spending on purchase of goods and services is more than one-quarter of total current expenditures or 4 percent of GDP. The share of spending in this category has generally been declining in all the countries except Sri Lanka and Taiwan. For Sri Lanka, this development could be due to larger purchases of arms and ammunition in response to the intensifying ethnic conflicts in the country.

For the region as a whole, spending on interest payments seems to moderate in 1996. The average annual spending in interest payments as a proportion to GDP came down to 2.7 percent during 1991-95 and further to 2.1 percent in 1996, compared with a ratio of 3.5 percent in 1986-90. This was not only due to the decline in global interest rates in nominal terms but also due to the success of many governments (particularly Malaysia, Singapore and Thailand) in reducing their debt burden substantially [see Table 2.7]. On an individual country basis, however, spending on interest payments in some countries recorded an increasing trend. For example, this type of spending has been increasing both in terms of total spending and GDP, due mainly to its inability to reduce debt stock as well as a sharp depreciation in nominal exchange rates over the years. Similarly, interest payments in the Philippines jumped nearly 5 folds from 1976 to 1990 in terms of total spending, before moderating since then.

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<sup>8</sup> See Philip Gerson, et al. (1997): 'Philippine Fiscal Policy' in *Macroeconomic Issues Facing ASEAN Countries*, edited by John Hicklin, et al., p. 106.

**Table 2.7**  
**RATIOS OF GOVERNMENT DEBT**

	1975		1980		1985		1990		1991		1992		1993		1994		1995		1996	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	100.0	22.3	100.0	18.6	100.0	32.2	100.0	45.7	100.0	40.3	100.0	42.7	100.0	37.5	100.0	36.6	100.0	30.9	100.0	24.1
Domestic	5.1	1.1	2.7	0.5	1.5	0.5	4.0	1.8	4.6	1.8	4.9	2.1	3.9	1.5	0.7	0.2	2.3	0.7	0.1	0.0
Foreign	94.9	21.1	97.3	18.1	98.5	31.7	96.0	43.9	95.5	38.4	95.1	40.6	96.1	36.0	99.3	36.3	97.7	30.2	99.9	24.1
<b>Korea</b>	100.0	14.7	100.0	14.0	100.0	15.5	100.0	8.3	100.0	11.5	100.0	11.5	100.0	10.9	100.0	10.0	100.0	9.0	100.0	8.6
Domestic	25.5	3.8	28.4	4.0	42.5	6.6	62.8	5.2	77.1	8.9	80.1	9.2	81.1	8.8	81.4	8.1	83.4	7.5	85.0	7.3
Foreign	74.5	11.0	71.6	10.0	57.5	8.9	37.2	3.1	22.9	2.6	19.9	2.3	18.9	2.1	18.6	1.9	16.6	1.5	15.0	1.3
<b>Malaysia</b>	100.0	48.8	100.0	43.4	100.0	81.7	100.0	81.8	100.0	76.6	100.0	66.1	100.0	59.3	100.0	50.1	100.0	42.8	100.0	36.8
Domestic	77.4	37.7	79.0	34.3	63.6	52.0	73.9	60.4	74.3	56.9	78.4	51.8	79.8	47.3	84.1	42.1	85.4	36.5	88.3	32.5
Foreign	22.6	11.0	21.0	9.1	36.4	29.7	26.1	21.3	25.7	19.6	21.6	14.3	20.2	12.0	15.9	8.0	14.6	6.2	11.7	4.3
<b>Nepal</b>	100.0	5.9	100.0	14.2	100.0	32.7	100.0	49.8	100.0	66.8	100.0	63.0	100.0	65.9	100.0	66.6	100.0	66.1	100.0	62.3
Domestic	61.5	3.7	45.4	6.4	39.6	12.9	28.5	14.2	26.0	17.3	24.7	15.5	22.6	14.9	23.1	15.4	22.1	14.6	22.0	13.7
Foreign	38.5	2.3	54.6	7.7	60.4	19.8	71.5	35.6	74.0	49.4	75.3	47.4	77.4	51.0	76.9	51.2	77.9	51.5	78.0	48.6
<b>Philippines</b>	100.0	14.3	100.0	16.9	100.0	32.9	100.0	51.3	100.0	49.7	100.0	52.8	100.0	67.1	100.0	56.4	100.0	61.1	100.0	52.8
Domestic	69.8	10.0	45.1	7.6	42.5	14.0	53.2	27.3	53.3	26.5	61.0	32.2	64.7	43.5	66.8	37.7	62.1	37.9	64.2	33.9
Foreign	30.2	4.3	54.9	9.3	57.5	18.9	46.8	24.0	46.7	23.2	39.0	20.6	35.3	23.7	33.2	18.7	37.9	23.1	35.8	18.9
<b>Singapore</b>	100.0	47.5	100.0	64.7	100.0	86.3	100.0	80.9	100.0	82.4	100.0	85.9	100.0	75.7	100.0	72.9	100.0	74.8	n.a.	n.a.
Domestic	91.4	43.4	94.3	61.0	98.2	84.7	99.9	80.8	99.9	82.4	100.0	85.9	100.0	75.7	100.0	72.9	100.0	74.8	n.a.	n.a.
Foreign	8.6	4.1	5.7	3.7	1.8	1.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.a.	n.a.
<b>Sri Lanka</b>	100.0	57.0	100.0	78.4	100.0	80.9	100.0	96.6	100.0	98.5	100.0	95.4	100.0	96.8	100.0	95.1	100.0	94.6	100.0	92.2
Domestic	71.7	40.9	56.3	44.2	48.1	38.9	43.1	41.6	41.5	40.9	41.9	40.0	44.2	42.8	45.2	43.0	45.2	42.8	49.2	45.4
Foreign	28.3	16.1	43.7	34.2	51.9	42.0	56.9	55.0	58.5	57.6	58.1	55.4	55.8	54.0	54.8	52.1	54.8	51.9	50.8	46.8
<b>Taiwan</b>	n.a.		n.a.		100.0	2.1	100.0	3.5	100.0	4.3	100.0	6.9	100.0	9.4	100.0	10.0	100.0	10.5	100.0	10.5
Domestic	n.a.		n.a.		81.9	1.7	97.8	3.4	98.1	4.2	99.2	6.9	99.4	9.4	99.6	10.0	99.7	10.5	99.8	10.5
Foreign	n.a.		n.a.		18.1	0.4	2.2	0.1	1.9	0.1	0.8	0.1	0.6	0.1	0.4	0.0	0.3	0.0	0.2	0.0
<b>Thailand</b>	100.0	20.5	100.0	23.7	100.0	32.4	100.0	18.4	100.0	13.3	100.0	10.9	100.0	8.4	100.0	5.8	100.0	4.7	100.0	3.6
Domestic	93.9	19.3	82.3	19.5	72.7	23.5	76.4	14.0	70.3	9.3	68.4	7.4	61.4	5.2	52.6	3.1	38.4	1.8	29.5	1.1
Foreign	6.1	1.3	17.7	4.2	27.3	8.8	23.6	4.3	29.7	4.0	31.6	3.4	38.6	3.2	47.4	2.8	61.6	2.9	70.5	2.6

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

A = In proportion to total government debt.

B = In proportion to GDP.

Notes: 1. As the data for Taiwan are available from 1983, the figure shown in 1980 is that of 1983.

2. Components may not add up to total due to rounding.

### ***2.3.2b Government Expenditure by Functions***

Table 2.8 provides the functional breakdowns of government spending of 9 SEACEN countries for which comparable data are available. On the whole, economic services are observed to be scaled down sharply, from a high of 7 percent of GDP or almost one-third of total spending (excluding net lending) during 1981-85, to 4.3 percent of the GDP or 23.6 percent of total spending during 1991-95. This shows that the cutback on government spending in the recent years has been mainly the result of a declining share of spending on economic services.

The growing emphasis of the governments to expand education, better health facilities, etc., led to a rise in the spending on social services in 1996. As a result, social services have become the largest item of the budgets of all the countries in the region except Myanmar, Nepal and the Philippines. In the case of Nepal, whose spending is still dominated by economic services, the spending proportion on social services is increasing fast in the recent years. Similarly, in the Philippines, the proportion is increasing both in terms of GDP as well as total spending. In the case of Myanmar, however, the proportion has been declining over the years.

On the average, spending on general public services which includes spending on public order and safety has been declining both in terms of GDP as well as total spending. The region's spending on this component decreased to 12.7 percent of total expenditure (2.2 percent of GDP) in 1996 as compared to the annual average spending of 13.1 percent of total expenditure (2.7 percent of GDP) during 1981-85. Such adjustment was most pronounced in Indonesia, followed to a certain extent in Myanmar and Nepal. Though the Philippines' spending on this component has increased to 2.5 percent of GDP in 1996 as against the annual average of 2.1 percent during 1981-85, spending in proportion to total expenditure has shown some decreases. For Malaysia, spending on this category has been on a rising trend. As a proportion to total spending, it climbed to 15.8 percent, or 3.6 percent of GDP in 1996

**Table 2.8**  
**GOVERNMENT EXPENDITURE BY FUNCTIONS**

	1976-1980 (Average)		1981-1985 (Average)		1986-1990 (Average)		1991-1995 (Average)		1996	
	A	B	A	B	A	B	A	B	A	B
<b>Indonesia</b>	<b>100.0</b>	<b>21.9</b>	<b>100.0</b>	<b>21.4</b>	<b>100.0</b>	<b>20.9</b>	<b>100.0</b>	<b>17.2</b>	<b>100.0</b>	<b>14.7</b>
General public services <sup>1</sup>	28.3	6.2	31.5	6.7	32.2	6.7	21.7	3.9	18.7	2.8
Defence	15.6	3.4	12.4	2.7	7.5	1.6	6.7	1.1	7.3	1.1
Social services	13.9	3.0	14.4	3.1	13.1	2.7	24.9	4.1	41.5	6.1
Economic services	32.8	7.2	34.4	7.3	24.7	5.1	27.3	4.7	23.6	3.5
Other expenditure	9.4	2.0	7.2	1.7	22.5	4.7	19.4	3.3	8.9	1.3
<b>Korea</b>	<b>100.0</b>	<b>16.3</b>	<b>100.0</b>	<b>16.9</b>	<b>100.0</b>	<b>15.5</b>	<b>100.0</b>	<b>17.1</b>	<b>100.0</b>	<b>18.6</b>
General public services <sup>1</sup>	10.5	1.7	10.8	1.8	9.9	1.5	10.5	1.8	10.6	2.0
Defence	34.5	5.6	31.6	5.4	26.3	4.1	20.0	3.4	17.3	3.2
Social services	24.6	4.0	28.7	4.9	30.2	4.7	32.3	5.5	34.8	6.5
Economic services	18.5	3.0	15.0	2.5	17.8	2.8	19.3	3.3	21.3	4.0
Other expenditure	12.0	1.9	13.9	2.3	15.8	2.4	18.0	3.1	16.1	3.0
<b>Malaysia</b>	<b>100.0</b>	<b>26.0</b>	<b>100.0</b>	<b>38.4</b>	<b>100.0</b>	<b>29.0</b>	<b>100.0</b>	<b>26.5</b>	<b>100.0</b>	<b>22.5</b>
General public services <sup>1</sup>	5.6	1.5	4.6	1.8	14.7	4.3	15.4	4.0	15.8	3.6
Defence	15.8	4.1	15.1	5.8	9.0	2.6	11.6	3.1	11.1	2.5
Social services	32.9	8.5	31.9	12.3	34.6	10.0	37.3	9.8	42.5	9.6
Economic services	19.2	5.0	29.0	11.1	23.3	6.8	18.9	5.0	21.9	4.9
Other expenditure	26.6	6.9	19.5	7.5	18.5	5.4	16.8	4.5	8.8	2.0
<b>Myanmar</b>	<b>100.0</b>	<b>14.5</b>	<b>100.0</b>	<b>16.2</b>	<b>100.0</b>	<b>14.6</b>	<b>100.0</b>	<b>11.4</b>	<b>100.0</b>	<b>10.7*</b>
General public services <sup>1</sup>	16.7	2.4	14.1	2.3	15.7	2.3	12.9	1.5	10.6*	1.1*
Defence	24.6	3.6	19.5	3.2	19.2	2.8	33.4	3.7	36.7*	3.9*
Social services	28.0	4.1	29.0	4.7	34.0	5.0	27.8	3.3	19.6*	2.1*
Economic services	27.5	4.0	34.7	5.6	29.0	4.2	21.4	2.4	27.6*	3.0*
Other expenditure	3.2	0.5	2.7	0.4	2.1	0.3	4.4	0.5	5.5*	0.6*
<b>Nepal</b>	<b>100.0</b>	<b>12.9</b>	<b>100.0</b>	<b>17.5</b>	<b>100.0</b>	<b>18.0</b>	<b>100.0</b>	<b>17.0</b>	<b>100.0</b>	<b>19.8</b>
General public services <sup>1</sup>	11.8	1.5	11.3	2.0	8.5	1.5	9.2	1.6	7.5	1.5
Defence	6.8	0.9	6.0	1.1	5.8	1.0	5.7	1.0	4.4	0.9
Social services	19.1	2.4	20.5	3.6	20.6	3.7	23.2	3.9	25.1	5.0
Economic services	54.2	7.0	53.5	9.4	47.5	8.6	45.1	7.7	43.0	8.5
Other expenditure	8.0	1.0	8.6	1.5	17.6	3.2	16.9	2.9	20.0	4.0
<b>Philippines</b>	<b>100.0</b>	<b>14.8</b>	<b>100.0</b>	<b>14.9</b>	<b>100.0</b>	<b>18.3</b>	<b>100.0</b>	<b>19.1</b>	<b>100.0</b>	<b>18.5</b>
General public services <sup>1</sup>	17.5	2.6	14.1	2.1	10.5	1.9	13.5	2.6	13.6	2.5
Defence	16.6	2.4	10.5	1.6	11.2	2.0	9.2	1.8	8.6	1.6
Social services	22.3	3.3	23.4	3.5	22.3	4.1	23.3	4.4	26.8	5.0
Economic services	43.4	6.4	42.6	6.4	27.9	5.1	24.9	4.7	22.7	4.2
Other expenditure	0.2	0.1	9.4	1.3	28.1	5.2	29.1	5.5	28.2	5.2
<b>Singapore</b>	<b>100.</b>	<b>19.9</b>	<b>100.0</b>	<b>24.1</b>	<b>100.0</b>	<b>26.0</b>	<b>100.0</b>	<b>17.2</b>	<b>100.0</b>	<b>14.1*</b>
General public services <sup>1</sup>	10.6	2.1	12.8	3.1	11.3	3.0	14.2	2.4	16.7*	2.4*
Defence	26.8	5.3	21.2	5.1	20.1	5.1	26.5	4.5	32.1*	4.5*
Social services	33.5	6.7	35.2	8.5	35.3	9.1	38.5	6.6	36.3*	5.1*
Economic services	14.0	2.8	15.3	3.7	17.6	4.6	10.1	1.8	7.6*	1.1*
Other expenditure	15.1	3.0	15.4	3.7	15.6	4.2	10.8	2.0	7.2*	1.0*
<b>Sri Lanka</b>	<b>100.0</b>	<b>33.4</b>	<b>100.0</b>	<b>31.6</b>	<b>100.0</b>	<b>30.8</b>	<b>100.0</b>	<b>27.7</b>	<b>100.0</b>	<b>27.4</b>
General public services <sup>1</sup>	10.2	3.4	9.5	3.0	13.9	4.3	10.6	2.9	8.8	2.4
Defence	2.1	0.7	3.5	1.1	7.3	2.3	11.8	3.3	17.7	4.9
Social services	36.0	11.6	25.2	8.0	27.1	8.3	33.8	9.4	33.5	9.2
Economic services	16.8	5.5	39.9	12.6	26.7	8.3	18.5	5.1	16.6	4.6
Other expenditure	34.9	12.2	22.0	6.9	25.0	7.7	25.3	7.0	23.4	6.4
<b>Thailand</b>	<b>100.0</b>	<b>16.8</b>	<b>100.0</b>	<b>19.7</b>	<b>100.0</b>	<b>16.1</b>	<b>100.0</b>	<b>15.6</b>	<b>100.0</b>	<b>16.1</b>
General public services <sup>1</sup>	9.3	1.6	8.9	1.8	9.7	1.5	11.0	1.7	11.8	1.9
Defence	21.0	3.5	19.9	3.9	18.3	3.0	15.6	2.4	12.7	2.0
Social services	31.7	5.3	30.0	5.9	31.5	5.1	36.8	5.7	39.1	6.3
Economic services	24.0	4.0	23.3	4.6	20.8	3.3	27.1	4.2	30.2	4.9
Other expenditure	13.9	2.4	17.9	3.5	19.8	3.2	9.5	1.5	6.3	1.0
<b>Total (average)</b>	<b>100.0</b>	<b>19.6</b>	<b>100.0</b>	<b>22.3</b>	<b>100.0</b>	<b>21.0</b>	<b>100.0</b>	<b>18.7</b>	<b>100.0</b>	<b>18.0</b>
General public services <sup>1</sup>	13.4	2.6	13.1	2.7	14.0	3.0	13.2	2.5	12.7	2.2
Defence	18.2	3.3	15.5	3.3	13.9	2.7	15.6	2.7	16.4	2.7
Social services	26.9	5.4	26.5	6.0	27.6	5.8	30.9	5.9	33.2	6.1
Economic services	27.8	5.0	32.0	7.0	26.1	5.4	23.6	4.3	23.8	4.3
Other expenditure	13.7	3.3	13.0	3.2	18.3	4.0	16.7	3.4	13.8	2.7

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

A = In proportion to total expenditures excluding net lending

B = In proportion to GDP;

\* Denotes data for 1995

<sup>1</sup> Include general public services and public order and safety.

Notes: 1. Since the data for Malaysia from 1982 to 1987 period are not reported in the Government Finance Statistics, the average shown in 1981-85 are the figures for one year (1981) and the average shown in 1986-90 are for three years (1988-90).

2. In case of Nepal, the data for 1986 are not available, so the average shown in 1986-90 are for four years (1987-1990).

3. Taiwan's data for functional classification are not available.

4. Components may not add up due to rounding.

from just 4.6 percent of total expenditure or 1.8 percent of GDP during 1981-85. Thailand is another country whose spending in general public services has been increasing both in proportion to GDP and total spending, albeit marginally. For Singapore, although the ratio in total expenditure has been increasing in the recent years, the spending in term of the GDP has declined since 1991.

Defence spending of the region which was as high as 3.3 percent of GDP during 1981-85 (the same proportion as during 1976-80), decreased to 2.7 percent of GDP during 1986-90, and has been stabilised since the early 1990s. On an individual basis, however, such spending showed a moderate increasing trend in Sri Lanka and Myanmar.

Myanmar, which traditionally has large defence spending, continued with this trend into the 1990s. As a consequence, defence emerged as the largest item of the budget in 1995, accounting for nearly 40 percent of its budget (3.9 percent of GDP). Sri Lanka's defence spending has also been increasing particularly since the latter part of 1980s. Defence spending of Sri Lanka, which was just 3.5 percent of the total budget (1.1 percent of GDP) during 1981-85 climbed to 17.7 percent of the budget (4.9 percent of GDP) in 1996. Singapore's spending on defence as proportion to total spending also rose steadily from slightly more than one-fifth of its total expenditure during 1981-85 to more than one-fourth during 1991-95, and about one-third in 1996. However, viewed from the ratio in GDP, it has been moderating since the 1990s, indicating a faster rise in GDP.

From the other SEACEN countries, spending on defence both in proportion to GDP as well as total expenditure have been moderated even though the magnitude of the cuts varies across countries. Given the international peace and stability brought about by the end of the cold war, there seems to be further scope for the SEACEN countries to further scale down defence expenditure, which is considered as the most unproductive form of spending economically.

## Chapter 3

### ANALYTICAL FRAMEWORK AND METHODOLOGY

#### 3.1 Theoretical Aspects and Review of Literature

The standard Keynesian view is that fiscal consolidation reduces aggregate demand and income directly through the multiplier effect. The contractionary effect of cuts in expenditure is even greater than that of tax increases. However, in the expanded analysis of the Keynesian model, the 'crowding-in' effects could offset, albeit partially, the negative multiplier effects through lower interest rates and currency depreciation. On the other hand, the neo-classical view suggests that improvement in fiscal balance would have positive impact on an economy especially through the wealth effects and expectation effects, and it is possible for these positive impact to outweigh the negative Keynesian effects even in short term.

In support of the wealth effects of fiscal deficits, Alesina and Perotti (1996) argue that if a cut in government spending is perceived as long lasting, consumers would think it as a permanent reduction in the future tax burden, generating a positive wealth effect. Even tax increases might have expansionary effects on consumption. Based on Blanchard's (1990) argument, tax increases today can have expansionary effects, the general public expects to face with less dramatic and disruptive tax increases in the future. People may reduce precautionary savings when they are more certain about the future course of the fiscal policy.

The other channel for wealth effects of fiscal policy arises from interest rates. In the words of McDermott and Wescott (1996), 'a smaller budget deficit could reduce interest rates significantly by reducing the perceived risk that government would depreciate its public debt via high inflation, and this could lead to positive wealth effects on demand.' The reduction in interest rates can also exert expansionary effects on private investments.

The results of the several empirical studies carried out on the industrial countries' fiscal adjustments in the recent years have corroborated the expansionary effects of fiscal contraction on economy.<sup>9</sup> Some of the studies, for example Giavazzi and Pagano (1996), have found that large and persistent changes in fiscal policy are more likely to have positive non-Keynesian response to private consumption, while small adjustments may have the opposite effect for the opposite reason (lack of credibility). The bold and decisive fiscal policy stance may have a significant credibility effect on interest rates, which would crowd in private investment (Alesina and Perotti, 1996).

Moreover in case of developing countries, high fiscal deficits would crowd out private investment through credit rationing and interest rate effect. The relative importance of these two channels depends on the degree of financial liberalisation in the economy. Even a money-financed fiscal expansion may lower investment in a financially repressed economy, as the rise in inflation brought about by such financing would reduce real interest rates and hence depress saving (Ajay Chhibber and Mansoor Dailami).<sup>10</sup>

One of the main consequences of the oil shock in the 1980s was the structural adjustment focusing on fiscal consolidation in developing countries. However, experiences show that the main burden of fiscal adjustments is borne by public investment, in spite of the fact that not all kinds of government spending would result in the crowding out of private sector activities. Some components of spending, especially on core infrastructure investments such as roads or communication, may be complementary with private investment (Blezer and Khan 1984; and Greene and Villanueva 1990). Tanzi and Zee (1996) indicated position externality of certain type of government spending. In their words, 'many public investment projects could be wasteful, for example, in the sense that their marginal net present values could be negative for the society as a whole; at the same time, many public consumption expenditures, such as certain

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<sup>9</sup> See Alesina and Perotti (1996) and McDermott and Wescott (1996).

<sup>10</sup> Extracted from Riccardo Faini and Jaime de Melo, 1991, p. 11.

kinds of educational training, operations and maintenance spending on existing infrastructure, and even targeted funding for R&D activities, could also be enormously beneficial for long-run growth.'

Regarding revenue, Tanzi and Zee pointed that structure of taxation could have important implications for growth. They advocated that a shift from income to consumption taxation would reduce the disincentive to save thus providing a boost to capital accumulation. On the other hand, too much reliance on trade taxes would be harmful for growth through reduced exposure of domestic industries to international markets and competition.

Keeping in mind the economic theories as well as findings of the previous work as summarised above, the present study attempted to analyse fiscal consolidation of the SEACEN countries focussing on both size and composition of adjustment along the same line as the work done by Alesina and Perotti. Although this study could not impute cyclical corrections and gave precise definitions of 'tight' and 'success' due to lack of required data and information, we still arrived at some consistent findings using the methodology mentioned below.

### **3.2 Methodology, Sample and Data**

#### **3.2.1 *Fiscal Impulse Measures***

The main concern of the study is to examine the effects of discretionary fiscal measures in reducing government deficits and the debt. As the first task is to measure the stance of fiscal policy, primary balance defined as overall balance minus interest payments is used rather than overall balance, because interest payments are given in the short run.<sup>11</sup> In addition, a concept of fiscal impulse is used to measure the impact of policy changes as opposed to changes caused by the business cycle. Therefore, to assess the effects of discretionary actions of the government in the budget more accurately one ought to remove not only the

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<sup>11</sup> Foreign grants are also excluded.



interest payments but also the cyclical components from it. Alesina and Perotti (1995) listed the following methods to remove cyclical components:

- (i)  $\Delta$  Primary Deficits  $FI = (g_t - t_t) - (g_{t-1} - t_{t-1})$
- (ii) The Blanchard Measure  $FI = (g_t (U_{t1}) - t_t (U_{t1})) - (g_{t-1} - t_{t-1})$
- (iii) The OECD Measure  $FI = [(G_t - T_t) - (G_{t-1} (1 + \hat{y}_t) - T_{t-1} (1 + y_t))]/Y_{t-1}$
- (iv) The IMF Measure  $FI = [(G_t - T_t) - (G_0 (1 + \hat{y}_t) - T_0 (1 + y_t))]/Y_{t-1}$

where,

- $g_t$  : Total primary expenditure (total current expenditure plus gross capital accumulation minus interest payment) as percentage of GDP.
- $t_t$  : Total revenue as percentage of GDP
- $U_t$  : Unemployment rate
- $G_t$  and  $T_t$ : Total primary expenditure and revenues
- $y_t$  : Growth rate of nominal GDP
- $\hat{y}_t$  : Growth rate of nominal potential GDP
- $Y_t$  : Value of nominal GDP
- $G_0$  and  $T_0$ : Total primary expenditure and revenues in the base year, when the actual output is equal to potential output

Of the above measures of cyclical correction, Alesina and Perotti (1995 and 1996) used the Blanchard measure to analyse the industrial countries' fiscal policy. The method is presented as follows:

$$D_t = a_1 + a_2 \text{Trend1} + a_2 \text{Trend2} + a_3 U_t + E_t \quad \dots \dots \dots (1)$$

where,

- $D_t$  : Dependent variables (respective components of government expenditures or revenue) as a share of GDP at time  $t$
- Trend1 (1975-85) and Trend2 (1986 onwards): The two time trends
- $U_t$  : Unemployment rate at time  $t$
- $E_t$  : Residual

After estimating the above equation for each country, the values of the underlying dependent variables are computed for the period 't' considering constant unemployment rate between period t and t-1 with the help of the following equation:

$$D = \hat{\alpha}_0 + \hat{\alpha}_1 \text{Trend1} + \hat{\alpha}_2 \text{Trend2} + \hat{\alpha}_3 U_{t-1} + \hat{\epsilon}_t \quad \dots \dots \dots (2)$$

where,  $U_{t-1}$  is the previous year's unemployment rate.

By computing different components of government expenditure and revenue, the cyclically adjusted (unemployment adjusted) primary balance series as a share of GDP could be computed. The fiscal impulse measure is then constructed by deducting the preceding year's cyclically adjusted primary deficit from the same variable of the current year (see Alesina and Perotti 1996 for detail).

We also estimated the equations using this method to calculate the cyclically adjusted primary balance of the SEACEN countries. Unfortunately, we found the results statistically insignificant for all countries except for Korea. The results were insignificant even for Korea in case of capital expenditure, and other purchase of goods and services. This seems quite logical in view of the absence of unemployment insurance scheme (though Korea has started this scheme lately in the recent years) in the SEACEN region as opposed to the availability of such benefit in the industrial countries.

As the Blanchard's measure of cyclical corrections could not be applied, we chose method a) with some modification, rather than the OECD and/or the IMF methods considering that these methods would also not be appropriate for measuring the fiscal impulse of the SEACEN countries due to the same reason, i.e., absence of unemployment insurance scheme. Though this method, if applied directly, ignores the effects of cyclical fluctuations of growth and unemployment on the budget, it is very simple and transparent. We also correct the cyclical components by the following methodology suggested by Callatay and Mansur (1996) in calculating the cyclical component from Jordan's government revenue.

Primary expenditures are assumed not to be cyclically affected, in view of the almost non-existence of the unemployment insurance scheme in the SEACEN countries.

In the absence of discretionary measures, revenues are assumed to be a function of the observed output and the average tax pressure ratio (revenues over GDP). Thus the total revenues can be decomposed in the following manner:

$$T_t = t_a * Y_t + IT_t = t_a * YP_t + t_a * (Y_t - YP_t) + IT_t \quad \dots \quad \dots \quad \dots \quad (3)$$

The item  $t_a * (Y_t - YP_t)$  in the above equation relates to the cyclical effect. Thus, the cyclically adjusted revenue would be:

$$TC_t = t_a * YP_t + IT_t \quad \dots \quad \dots \quad \dots \quad (4)$$

where,

$T_t$	=	Total revenue in year 't'
$t_a$	=	Average ratio of revenue to GDP (during the sample period),
$Y_t$	=	Nominal GDP at current prices
$IT_t$	=	Discretionary revenue in year t,
$YP_t$	=	Potential GDP at current prices in year t
$TC_t$	=	Cyclically adjusted revenue in period t

The potential GDP (at constant prices) is assumed to grow at the constant average growth rate observed during the sample period of 1975 to 1996. When average growth rate is known, the initial level of potential output can be assumed to be equal to the actual output in the base year (1974) and hence potential output for the following years can be computed accordingly. However, as this would have led to an almost permanent excess of actual output over potential output, thus disturbing cyclical components, the level of potential output in 1974 has been adjusted in such a way that the undiscounted sum of the differences between the actual and the potential real output amounts to zero.<sup>12</sup>

<sup>12</sup> For details, see Callatey and Maunsur (1996): *Jordan, Strategy for Adjustment and Growth*, pp. 32-33.

After estimating the real potential GDP, the nominal values are generated using the GDP deflators.

Once the cyclical effects from all the components of revenues have been determined and removed, cyclically adjusted primary balance can be computed. The fiscal impulse is then measured as the difference between the cyclically adjusted primary balance as percentage of GDP in period  $t$  and the same variable in period  $t-1$ .

The following reasons justify for the choice of this method:

- (i) As a useful measure of the fiscal stance should be kept simple, even at the cost of ignoring some important considerations.<sup>13</sup> Despite satisfying this requirement, this method removes cyclical components at least from revenues.
- (ii) Since our focus is on relatively large budget adjustments, we are less likely to be unduly concerned with cyclical factors.
- (iii) Other methods are also not full proof. In this connection, it would be relevant to cite the example given by Alesina and Perotti (1996). They stated that Perotti compares the OECD and the Blanchard measures and concludes that the OECD measure systematically overestimates the amount of discretionary component relative to the Blanchard measure when the deficit falls, and underestimates the amount of discretionary component when the deficit increases.<sup>14</sup>
- (iv) While no method is perfect for removing the cyclical components, there are also literature, which have even stated that most fiscal variables other than interest payments are, to some extent, under direct government control and must reflect the necessary fiscal adjustments.<sup>15</sup>

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<sup>13</sup> Alesina, et al. (1995): *Fiscal Expansions and Adjustments in OECD Countries*, p. 212.

<sup>14</sup> Alesina, et al. (1996): *Fiscal Adjustments in OECD Countries: Composition and Macroeconomic Effects*, p. 10.

<sup>15</sup> See for example, Vito Tanzi, et al. (1987): *Inflation and Measurement of Fiscal Deficits*, p. 731.

Thus, the ensuing analysis of the SEACEN fiscal policies is proceeded on the basis of the following method:

$$FI = (g_t - tc_t) - (g_{t-1} - tc_{t-1})$$

where,

FI is the fiscal impulse measure,  $g_t$  and  $g_{t-1}$  are actual expenditures in period  $t$  and  $t-1$  and  $tc_t$  and  $tc_{t-1}$  are the cyclically adjusted revenues of corresponding period (all are expressed as percent of GDP).

### 3.2.2 *Sample and Data*

The analysis is based on the consolidated central government data covering the period from 1975 to 1996. However, since the required set of data for this period are not available for all the countries, we have excluded some country years, resulting in 158 usable observations out of the sample of 220. The main source of data is the Government Finance Statistics (GFS) of International Monetary Fund (various issues). However, some data are also sourced from International Financial Statistics Yearbook (IFS), the SEACEN Financial Statistics, Key Economic Indicators of the Asian Development Bank, Taiwan Statistical Data Book, Economic Survey HMG/Nepal, etc.

## Chapter 4

### FISCAL STANCE IN SEACEN COUNTRIES

#### 4.1 Size of Fiscal Adjustment and Its Quality

The main purpose of this study is to determine the magnitude of fiscal consolidation. In this context, we have to find out, how tightly and successfully the SEACEN members are adopting their fiscal consolidation exercise. This calls for the definition of the terms 'tight' and 'successful'.

##### 4.1.1 *Tight Fiscal Policy*

In defining the tight policy we are trading off two opposite requirements. On the one hand, we need to be sure that the tight fiscal policies are really different from business as usual and that they are not mainly influenced by cyclical factors. On the other hand, it is necessary to have sufficient number of observations to ensure the validity of our test.<sup>16</sup> In this context, we considered several alternatives.

First, we tried to analyse the SEACEN fiscal policy on the basis of this criterion: a country's fiscal policy in a given year is tight if cyclically adjusted primary balance as percent of GDP falls by more than national average minus one standard deviation. We found this criterion too restrictive as it yielded only 27 episodes of tight policy, which is just about one-sixth of total usable observations of 158.

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<sup>16</sup> See Alesina and Perotti (1995): *Fiscal Expansions and Adjustments in OECD Countries*, p. 216.

Thus, we opted for the criterion used by Alesina and Perotti (1996)<sup>17</sup>. In this case, a country's fiscal policy in a given year is defined as 'tight' when fiscal impulse as percent of GDP is less than national average minus half of a standard deviation.

Symbolically,

$$FI < \mu - 0.5\sigma$$

where, FI is change in cyclically adjusted primary balance as percent of GDP and  $\mu$  and  $\sigma$  are, respectively, its average and standard deviation.

We consider this criterion more appropriate because of the following:

- (i) It provides reasonable number of observations for our analysis.
- (ii) The improvement in primary balance by more than national average minus a half of standard deviation can be considered as significant in the budget adjustment of a country.
- (iii) It captures the wide fluctuations in the primary balance between countries better. For example, a 1-percent improvement in primary balance may represent a large adjustment for Korea (which turns out to be more than the national average minus one standard deviation) while such improvement is a little more than business as usual in, say, Sri Lanka.

The following Table 4.1 lists the episodes of tight fiscal policy of the SEACEN countries on the basis of above criterion.

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<sup>17</sup> See Appendix 'C' for their definition of tight policy. They have analysed the OECD fiscal adjustment on the basis of that definition.

**Table 4.1**  
**EPISODES OF FISCAL CONSOLIDATION<sup>18</sup>**

Country	Years of Tight Fiscal Policy
Indonesia <sup>1</sup>	1977, 1979, 1982, 1984, 1987, 1990
Korea <sup>1</sup>	1980, 1983, 1992, 1993
Malaysia <sup>1</sup>	1979, 1983, 1984, 1985, 1987, 1988
Philippines <sup>2</sup>	1983, 1984, 1985, 1987, 1991, 1992, 1994
Singapore <sup>2</sup>	1977, 1982, 1984, 1988, 1989, 1992
Sri Lanka <sup>1</sup>	1977, 1981, 1982, 1983, 1984, 1989, 1992
Taiwan <sup>3</sup>	1993, 1994, 1995
Thailand <sup>1</sup>	1981, 1983, 1984, 1986, 1987, 1988, 1989,

<sup>1</sup> Data from 1975 to 1996.

<sup>2</sup> Data from 1975 to 1995.

<sup>3</sup> Data from 1983 to 1996.

Source: *IMF Government Finance Statistics* and responses from member central banks and monetary authorities.

Note: Data for government expenditure by economic classification are not available for Myanmar and Nepal.

The above table shows 46 episodes of tight fiscal policy in the 8 SEACEN countries, which turns out to be slightly more than 29 percent of the total number of usable observations of 158. The list includes several tight fiscal policies of more than one year in succession.

The fiscal performance of the SEACEN countries for all samples as well as for periods of tight fiscal policy is presented in Table 4.2. The region has been under fiscal consolidation rather than expansion, as the cyclically adjusted primary deficits during the period have decreased by 0.23 percent of GDP a year on the average, as a result of the adjustments in both the expenditure and the revenue. Although the major portion (about two-thirds) of the adjustments was due to increases in revenues in line with their efforts to raise revenue, primary expenditures were also cut. This suggests that the SEACEN countries, in general, have been giving due concern to the adverse impact of fiscal expansion on the economy. The primary balance of six out of the eight countries in the sample, on the average, improved--remarkably, especially in case of Singapore and

<sup>18</sup> If we use the criterion adopted by Alesina and Perotti (1996), we find 44 episodes as against 46 here (see Appendix C.1).



Malaysia. On the average, the primary balance for Singapore fell by 0.60 percent of GDP annually during the sample period followed by Malaysia (0.44 percent), the Philippines (0.29 percent) and Indonesia (0.27 percent). Other countries' fiscal performance also witnessed some improvements. However, the primary balances of Korea and Taiwan, on average, remained stable. This is because the 2 countries did not need to resort to highly expansionary policy during the sample period, as seen from relatively low debt to GDP ratio.

**Table 4.2**  
**TIGHT FISCAL POLICY: PRIMARY EXPENDITURES AND REVENUE**

	Number of Observations	Primary Balance	Primary Expenditures	Revenues
<b>All sample</b>	158	-0.23	-0.08	0.15
<b>Tight</b>	46	-2.73	-2.18	0.55

Source: *IMF Government Finance Statistics* and responses from member central banks and monetary authorities.

Note: All variables are changes of ratios over GDP.

In the sample, we observed 46 episodes of tight fiscal policy which fit our definition. During the period of tight fiscal policy, the region's primary balance, on average, witnessed an improvement of 2.73 percent of GDP annually. The bulk of it was the result of cuts in spending.

Adjustments in different components of expenditures and revenue during the tight episodes can be seen from the Table 4.3. Of the total adjustments in expenditures, capital spending bore the brunt of it (almost three-quarters of total), while current expenditures accounted for only slightly over one-fourth. Among the component of the current expenditures, wages and salaries are the least affected. If expressed in terms of GDP, capital spending was scaled down by 1.57 percent (about 58 percent of total adjustments) while that in the current expenditure was only 0.61 percent (slightly more than one-fifth of total adjustments). The cutback on current expenditures was made on subsidies and

current transfers (0.26 percent of GDP) followed by other purchase of goods and services (0.24 percent of GDP) and wages and salaries (0.11 percent).

**Table 4.3**

**TIGHT FISCAL POLICY:  
COMPOSITION OF CUTS IN SPENDING AND INCREASES IN REVENUE**

	As Percent of GDP	As Percent of Total Adjustments in Expenditures & Revenue
<b>1. <u>Primary Expenditures (a+b)</u></b>	<b><u>-2.18</u></b>	<b><u>100.00</u></b>
<b>a) Current Expenditures</b>	<b>(-0.61)</b>	<b>(27.98)</b>
Wages and salaries	-0.11	5.05
Subsidies & current transfers	-0.26	11.93
Other purchase of goods & services	-0.24	11.00
<b>b) Capital Expenditures</b>	<b>(-1.57)</b>	<b>(72.02)</b>
<b>2. <u>Revenues</u></b>	<b><u>0.55</u></b>	<b><u>100.00</u></b>
Income Tax	0.20	36.36
Taxes on Goods & Services	0.21	38.18
Taxes on International Trade	0.07	12.72
Other Tax Revenues	0.07	12.72
Non-Tax Revenues	0.00	0.00
	<b><u>-2.73</u></b>	
<b>3. <u>Primary Balance (1-2)</u></b>		

Source: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

Note: All variables are changes of ratios over GDP.

On the revenue front, of the annual average increase of 0.55 percent of GDP, nearly three quarters were contributed by income tax and domestic taxes on goods and services, the largest increase of which was from domestic taxes on goods and services. Taxes on international trade and transactions was raised by about 0.1 percent of GDP on an annual average (12.7 percent of total increases in the revenues).

Our next step is to determine which episodes of tight fiscal policy identified above were successful in reducing debt to GDP ratio on a sustainable basis. Not all the episodes of tight policy can be classified as successful because the improvement in a country's primary balance in a particular year may be due to unintended or ad-hoc efforts such as measures to collect revenue in arrears, sale of fixed assets, or ad-hoc cut in expenditures. Since these efforts may not be sustainable, it is necessary to determine which of the tight episodes identified above were successful. For this, we need to set out the criterion for success. Though open to different interpretations, because of different initial conditions across countries in the sample, we have adopted the following criterion.

#### 4.1.2 *Definition of Success*

A period of tight fiscal policy is successful if one of the following two conditions applies:<sup>19</sup>

- (i) During the following three years of the tight period, the ratio of cyclically adjusted primary balance over GDP falls by at least 2 percent of GDP annually on the average;
- (ii) Three years after the tight period the debt to GDP ratio is at least 5 percent of GDP below the level of the tight period.

Thus, "success" in fiscal adjustment in this definition is reflected in either the stock of debt or the flow of cyclically adjusted deficits. Table 4.4 lists all the cases of successful consolidation based on this definition.

<sup>19</sup> Regarding the debt, this definition is similar to the one given by Alesina and Perotti (1995 and 1996) whereas for the primary balance, we have modified the criterion with a view to capturing only the larger improvement in primary balance.

Note: A tight fiscal policy is successful if: (i)  $\frac{1}{3} [\Delta cpb (t+1) + \Delta cpb (t+2) + \Delta cpb (t+3)] \leq -2$ ; (ii)  $dgdpr (t+3) - dgdpr (t) \leq -5$ . Where,  $\Delta cpb$  is annual change in cyclically adjusted primary balance as percent of GDP, and  $dgdpr$  is total government debt as percent of GDP.

**Table 4.4**  
**SUCCESSFUL FISCAL CONSOLIDATION<sup>20</sup>**

Country	Successful
Indonesia	1987 and 1990
Malaysia	1983,1987 and 1988
Singapore	1992
Sri Lanka	1981 and 1989
Thailand	1986,1987,1988 , and 1989

Altogether 12 episodes of the fiscal consolidation or slightly more than one-fourth of all tight policy episodes were successful, leaving 31 cases unsuccessful. The remaining 3 episodes (the Philippines 1994; Taiwan 1994 and 1995) were indeterminate because data after the tight policy periods are not available. Korea, the Philippines and Taiwan did not have successful tightening of fiscal policy periods according to above criterion. This could be partly explained by the gradual adjustments made by Korea and Taiwan, which is justifiable in view of the historically low level of government debt in these countries. However, the case with the Philippines is quite different. Although the fiscal positions of the Philippines had shown some improvements in the latter part of the study period, the improvements did not seem to be due to major reforms in revenues or expenditures but mainly due to privatisation receipts, rundown in national government cash balances, and higher economic growth.<sup>21</sup>

#### **4.1.3 Success and Composition**

Table 4.5 shows that change in primary balance of the 12 cases of successful adjustments is much larger than unsuccessful ones. In the successful cases, fiscal impulse, on average, decreased by 3.36 percent of GDP annually as compared to a decline of 2.54 percent in the unsuccessful cases. Interestingly, in the successful cases almost all (99 percent) of the adjustments were from the spending side, while the revenue was virtually unchanged. On the other hand, in the unsuccessful cases, about 28 percent of the adjustment were from the revenue side. This suggests that efforts to increase revenue had negligible effects

<sup>20</sup> As stated somewhere else above, we obtained the successful years of the respective countries in the same way if we adopt the definition of tight policy given by Alesina and Perotti (1996).

<sup>21</sup> For more details, see Philip Gerson and David Nellor (1997): Philippine Fiscal Policy: Sustainability, Growth and Savings in 'Macroeconomic Issues Facing ASEAN Countries'. Edited by John Hicklin, David Robinson and Anoop Singh.

in making fiscal consolidation successful in the SEACEN region.

**Table 4.5**  
**FISCAL CONSOLIDATION: EXPENDITURE AND REVENUE**

	Number of Observations	Change in Primary Balance	Primary Expenditure s	Revenue
<b>Successful Adjustments</b>	12	-3.36	-3.32	0.04
<b>Unsuccessful Adjustments</b>	31	-2.54	-1.83	0.71

Source: *IMF Government Finance Statistics* and responses from member central banks and monetary authorities.

Note: All variables are changes of ratios over GDP.

Analysis of adjustments made on different types of spending and sources of revenue is presented below. Tables 4.6 and 4.7 present a breakdown into major components of the spending.

**Table 4.6**  
**SUCCESSFUL AND UNSUCCESSFUL ADJUSTMENTS:**  
**COMPOSITION OF EXPENDITURE CUTS**

	No. of Observations	Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
<b>Successful Adjustments</b>	12	-3.32	-1.68	-0.40	-0.35	-0.93	-1.64
<b>Unsuccessful Adjustments</b>	31	-1.83	-0.22	0.01	-0.26	0.03	-1.61

Source: *IMF Government Finance Statistics* and responses from member central banks and monetary authorities.

Note: All variables are changes of ratios over GDP.

**Table 4.7**  
**COMPOSITION OF EXPENDITURE CUTS**  
**(as percent of total)**

	No. of Observations	Total Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
<b>Successful Adjustments</b>	12	100	50.6	12.1	10.5	28.0	49.4
<b>Unsuccessful Adjustments</b>	31	100	12.1	-0.5*	14.2	-1.6*	87.9

Shares are derived from Table 4.6 above.

\* Indicates annual average increases in the respective expenditure components.

As seen from Table 4.6, the successful fiscal consolidation is mainly based on large cuts in both current expenditures and capital spending (in terms of

GDP). In fact, in the successful cases, all components of expenditures are adjusted, including wages and salaries. It should be noted that while lower bill for wages and salaries is a good sign, consideration should be given to the source of such decline. If this is due to the consolidation of staff size, it will be a step in the right direction. However, if this is the consequence of lower real wage for civil servants as generally practised by several developing countries, it can be counterproductive as this may adversely affect the efficiency and foster corruption.<sup>22</sup> In spite of a lack of detailed information of government employees and salary structure, the public statements on policy measures to downsize civil servants force or freeze the recruitment suggest that the fall in wage bills was, at least in part, due to the consolidation of civil service.

In the successful cases, the cuts in current expenditures were 1.68 percent of GDP (more than half of total spending cuts) per year as compared to just 0.22 percent of GDP (12 percent of total cuts in spending) in the unsuccessful cases. Of the total cuts in the current expenditures, the highest cut was in "purchases of goods and services" (0.93 percent of GDP a year) followed by "wages and salaries" (0.40 percent of GDP) and "subsidies and current transfers" (0.35 percent of GDP). For the unsuccessful episodes, two components of current expenditures, namely wages and salaries, and purchases of goods and services were actually increased. Adjustments were made only in subsidies and current transfers, that was nonetheless much lower than those in the successful episodes.

On the capital spending, it is interesting to note that both successful adjustments and unsuccessful ones incurred more or less the same extent of cutback of around 1.6 percent of GDP. However, if measured against total reduction, a cut in capital expenditure accounts for slightly less than 50 percent, compared with nearly 90 percent in the unsuccessful cases. This seems to suggest that without large adjustment in current expenditure, fiscal consolidation may not be successful.

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<sup>22</sup> For details, see *World Economic Outlook*, May 1996, pp. 72-73.

Tables 4.8 and 4.9 display the composition of tax increases. In cases of successful adjustments, increases in revenues were actually quite negligible. Total revenue increased by merely 0.04 percent of GDP, compared with an increase of more than 0.71 percent of GDP in the unsuccessful cases. Only three of the five components of taxes namely taxes on goods and service, income tax, and other taxes were higher during the successful cases as against the increases of all components in the unsuccessful ones. In fact, revenue from taxes on international trade and transactions, and non-tax revenues, were even lower, reflecting across the board reduction in the import duty in line with trade liberalisation. Another item that shows a decline was the non-tax revenue. Compared with a marginal increase of 0.03 percent of GDP in the unsuccessful cases, there was a decline of 0.2 percent of GDP in the successful ones. However, unlike the decline in taxes on international trade, which has a better prospect of higher revenue collection in the future, non-tax revenue is ad-hoc in nature and is unlikely to be a reliable source of revenue enhancement.

**Table 4.8**  
**SUCCESSFUL AND UNSUCCESSFUL CONSOLIDATION:**  
**COMPOSITION OF INCREASES IN REVENUE**

	No. of Observations	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on International Trade	Other Taxes	Non-Tax Revenues
Successful Adjustments	12	0.04	0.07	0.16	-0.08	0.08	-0.19
Unsuccessful Adjustments	31	0.71	0.23	0.24	0.16	0.05	0.03

Source: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

Note: All variables are changes of ratios over GDP.

**Table 4.9**  
**SUCCESSFUL AND UNSUCCESSFUL CONSOLIDATION:**  
**COMPOSITION OF TAX INCREASES AS A SHARE OF TOTAL TAX INCREASES**

	No. of Observations	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on International Trade	Other Taxes	Non-Tax Revenues
Successful Adjustments	12	1.00	1.75	5.00	-2.00	1.00	-4.75
Unsuccessful Adjustments	31	1.00	0.33	0.33	0.23	0.08	0.04

Source: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

Notes: All variables are changes of ratios over GDP.

Share computed on the basis of Table 4.8 above.

The above results are strikingly similar to those of the developed countries as presented by Alesina and Perotti (1996) in their study on OECD fiscal adjustments. The number of successful episodes in proportion to tight fiscal policies are similar (SEACEN: 26.1 percent, OECD: 25.8 percent); the successful adjustments are mainly the results of larger cuts in the components of current spending; and increases in revenues are lower in successful cases (almost negligible in case of the SEACEN countries).

Despite the similarities in the direction of adjustments, the size or magnitude of adjustments is different. Fiscal consolidations in the SEACEN countries were somewhat larger with higher adjustments in spending, particularly capital spending. In fact, the cut in capital expenditures in terms of GDP share is much higher in the SEACEN countries in comparison to the OECD. Difference can also be seen on the revenue side. While contribution of revenue in the SEACEN fiscal adjustments was rather minimal, almost zero in the successful cases, contribution of revenue in the OECD fiscal adjustments was relatively much higher.

#### **4.2 Macroeconomic Effects of Fiscal Consolidation**

The economic performance of the region measured in terms of key macroeconomic indicators before, during and after the fiscal consolidation is summarised in Table 4.10. The term 'before' refers to the preceding year of fiscal tightening, 'during' is the year of tight fiscal policy and 'after' is the year following the tight fiscal policy. The movements of some of the major macroeconomic variables namely growth, inflation, private investment, private consumption, and net exports are examined. All the variables examined are on the basis of yearly averages.

The region's GDP growth shows large differences between successful and unsuccessful cases. During the period of successful fiscal adjustment, the real GDP, on average, grew by 7.3 percent a year, a 1.1 percentage point higher in comparison to the year before adjustment. The growth after adjustment



remained as high as “during” the adjustment (7.2 percent). For the unsuccessful cases, the region’s economy grew by just about 4 percent a year, which was 1.1 percentage point lower than the year before adjustment. Though the growth rate increased to 4.7 percent afterward, it is still lower than the period before adjustment, and much lower than that achieved in the successful cases.

**Table 4.10**  
**MACROECONOMIC EFFECTS OF FISCAL CONSOLIDATION**  
**(1976-96)**

	Types of Fiscal Actions	Before <sup>a</sup>	During <sup>b</sup>	After <sup>c</sup>
<b>Real GDP<sup>1</sup></b>	Fiscal consolidation	5.3	4.9	5.4
	Successful	6.2	7.3	7.2
	Unsuccessful	5.0	3.9	4.7
<b>Private Investment<sup>2</sup> (Annual Average Percentage Change)</b>	Fiscal consolidation	19.7	18.5	14.7
	Successful	19.3	21.9	26.7
	Unsuccessful	19.8	17.1	10.0
<b>Private Consumption (Annual Average Percentage Change)</b>	Fiscal consolidation	14.3	14.9	14.3
	Successful	9.5	13.6	15.9
	Unsuccessful	16.1	15.5	13.7
<b>Real Interest Rates<sup>3</sup></b>	Fiscal consolidation	2.0	2.4	3.1
	Successful	4.6	4.7	5.0
	Unsuccessful	0.9	1.5	2.3
<b>Inflation<sup>4</sup></b>	Fiscal consolidation	8.9	8.6	8.0
	Successful	6.1	5.7	6.6
	Unsuccessful	10.0	9.7	8.6
<b>Net Exports as Percent of GDP</b>	Fiscal consolidation	-5.7	-3.9	-3.7
	Successful	-1.7	-0.6	-1.6
	Unsuccessful	-7.3	-5.1	-4.5

Sources: IMF *International Finance Statistics*, SEACEN *Financial Statistics*; and Taiwan *Statistical Data Book*.

<sup>a</sup> One year before consolidation.

<sup>b</sup> During consolidation.

<sup>c</sup> One year after consolidation.

<sup>1</sup> Annual average growth rate of real GDP.

<sup>2</sup> Annual rate of growth of private investment defined as gross fixed capital formation minus capital expenditure of the government.

<sup>3</sup> Deposit rates minus inflation (deposit rates are extracted from IFS country page line 60L. If such deposit rates are not available, three months deposit rates taken from SEACEN *Financial Statistics* are used).

<sup>4</sup> Annual average percentage change in consumer price index.

Private investment also showed substantially difference between the two types of adjustments. The region witnessed an investment boom during and after the successful adjustments of 21.9 percent and 26.7 percent respectively, compared with 19.3 percent before the adjustment.<sup>23</sup> On the other hand, growth in private investment for the unsuccessful cases, which started off at more or less the same level, declined steadily to 17.1 percent during the adjustment, and further to 10.0 percent a year after the adjustment.

<sup>23</sup> Since private sector investment series for most of the countries for most of the period are not available, such series are arrived by deducting capital expenditure of the government from the gross fixed capital formation. Thus, private sector investment here includes both individual and the corporate sector's investment.

The sharp rise in private investment, during the period of successful fiscal consolidation, was achieved even when real interest rates continued to be on a rising trend. When inflation is taken into consideration, the result seems to suggest that the larger part of the higher real interest rates was the consequence of lower inflation, not the rise in nominal interest rate. In fact, nominal interest rate may be even lower as the average annual inflation rate is 5.7 percent and real interest rate is 4.7 percent in the successful cases, compared with 9.7 percent and 1.5 percent respectively of the unsuccessful cases.

Growth rate of private consumption, though increased during and after the successful consolidation, was not as pronounced as in investment. The growth rate of private consumption was even lower in the successful cases in comparison to the unsuccessful ones. However, the growth in the successful cases seemed to accelerate during and after the successful adjustment as opposed to the declining trend in the unsuccessful cases. This seems to suggest that successful fiscal consolidation had positive impact on private consumption, probably through the wealth effect.

There are striking differences in the net exports between the two cases of fiscal adjustments. Although the average net exports in proportion to GDP falls during and after both the successful and unsuccessful adjustment cases, the magnitude was significantly lower in the successful cases. During and after the successful adjustment, the region recorded a decline in net exports by 0.6 percent and 1.6 percent of GDP, respectively, in comparison to the corresponding deficits of 5.1 and 4.5 percent, respectively, in the unsuccessful consolidation cases.

Thus, Table 4.10 paints a favourable picture of the SEACEN economies during the successful adjustments. This can be interpreted that successful fiscal adjustments exerted positive impact on growth not only through wealth and credibility effect but also through availability of credit to the private sector. On the one hand, bold and decisive fiscal adjustment measures enhance the credibility,

which help crowd in private investment and consumption of durable goods (Alesina and Perotti 1996). On the other hand, the large improvements in fiscal balance reduces/eliminates the financing needs of the government thus freeing up more financial resource for the private sector.

Empirical evidences in the SEACEN countries also show that private investment grew faster during the successful fiscal adjustment periods even when real interest rates remained high. This may seem to contradict both the neo-classical view of the expectation effects of small budget deficits as well as the fuller Keynesian model (for example, Blinder and Solow, 1973).<sup>24</sup> However, as mentioned above, the high real interest rates during this period are the consequence of better inflation performance, rather than the rise in nominal interest rates. Moreover, the evidences suggest that average nominal rates during successful adjustment seem to even fall from the corresponding rates a year ago. They were also lower than in the unsuccessful adjustment cases.

More importantly, the results suggest that a small variation in the interest rates does not hinder private investment, implying that macroeconomic stability together with availability of credit seem to be more important factors. In a liberalised financial system in which interest rates depend on demand for and supply of funds, a large demand for funds could be associated with investors' confidence on good prospects of returns on investment resulting from favourable macroeconomic climate. In such a situation, high real interest rates could be associated with investment boom and rapid growth.<sup>25</sup> This could be one explanation for the sharp rise in private investment one-year after successful consolidation, even in the face of higher interest rates. The favourable macroeconomic stability stemming from fiscal prudence was reinforced by the adjustment measures that were private-investment friendly. For instance, corporate tax and/or income tax rates as well as taxes on international trade were

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<sup>24</sup> See McDermott, et al., op. cit., p. 3.

<sup>25</sup> See Vicente Galbis (1998): *High Real Interest Rates Under Financial Liberalization: Is There A Problem?*, p. 56.

revised downwards, helping to expand investment and enhance competitiveness of domestic industries, in line with the view expressed by Tanzi and Zee (1996).

On the expenditure side, Table 4.7 shows that a reduction in capital spending as a proportion to total cut in total expenditure was much lower in the successful cases, compared with the unsuccessful ones. As indicated in Chapter 2, spending on economic services bore the major brunt of fiscal consolidation of the SEACEN countries. Even then, the region's growth performance remained robust. This should be attributed to the privatisation policies that helped crowding in the private sector investment, which is generally regarded as more efficient. On the other hand, the region enhanced its spending on social services particularly education, health, etc. As mentioned earlier, not all public spending crowd out private investment. Some of them, especially infrastructure investment, may be complementary (Blejer and Khan, 1984). Similarly, certain kind of spending such as spending on education may crowd in private sector investment through externality effect of public expenditure, which enhance growth by raising private sector productivity. This implies that though capital spending was substantially cut in the fiscal exercise of the region, efforts were made to maintain certain spending which complement and/or exert externality effect to private investment.

From the above analysis, it is obvious that a strong commitment to fiscal consolidation is good for the overall economic performance of an economy. However, given the interactions between economic performance and improvement in fiscal balance, it is difficult to indicate the direction of the causality between economic growth and successful fiscal consolidation. In this context, it should be noted that more than half (24 out of 46) of fiscal tightening occurred till the mid-1980s. But out of the 24 episodes, only two cases (Malaysia 1983 and Sri Lanka 1981) could be classified as successful. This, to a large extent, could be attributed to the difficult macroeconomic environment at that time, as most economies were in recession and international interest rates were high. Several SEACEN economies were not only faced with negative growth but also

experienced high inflation. Obviously, it would be very difficult to improve fiscal balances and reduce debt to GDP ratio under this circumstance.

After the mid-1980s, both of the problems mentioned above were over and the region's overall economic growth was on a rising trend till the current turmoil from mid-1997. Even in the period of high growth, only 10 of the 19 episodes of fiscal consolidations were successful.<sup>26</sup> So, in the favourable period too, about half of the efforts could not be successful. During 1990s only one episode (Singapore 1992) of fiscal tightening could be classified as successful.

There may be another argument regarding the contribution of successful consolidations to strong growth and vice versa, i.e., countries with higher growth are more likely to succeed in consolidation efforts than those with moderate or lower growth. This could be true if the conclusion is drawn only on the basis of the Philippines' fiscal policy, since none of the efforts of fiscal tightening in the Philippines was successful, against the background of low annual average growth rate during 1975-96. However, the fiscal consolidations of the two high growth economies of Korea and Taiwan could also be considered as not successful. Similarly, the number of successful fiscal consolidation cases of another high growth country – Singapore, was also less than that of Sri Lanka.

The above suggests that while high growth may help a country to succeed in fiscal consolidation, it does not guarantee success. Full commitment to consolidation is more important. It is due to the strong commitment that some of the fiscal adjustments of Malaysia (1983) and Sri Lanka (1981) could be regarded as successful even though the fiscal tightening was implemented in an unfavourable environment. It was imperative for them to pursue strong fiscal tightening as their fiscal deficits were rising unsustainably during the period. For other countries whose fiscal deficits while increasing were relatively not as high, showed less commitment towards fiscal restraint and adopted a more gradual

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<sup>26</sup> Though there were 22 episodes of fiscal consolidation during 1986-96, three of them could not be identified as successful or unsuccessful due to unavailability of data for three years after the fiscal tightening as stated in Section 4.1 above.

approach. It is not surprising that these efforts were not successful, especially those implemented before the mid-1980s. After the mid-1980s, however, when fiscal consolidation was implemented as part of a broader adjustment and reform program, the number of success cases also increased.

It should be noted that the second half of the 1980s remained the most successful period of fiscal tightening in the region. Nine of the 12 episodes of fiscal consolidation initiated during 1986-90 could be regarded as successful. All of the fiscal tightening efforts of Indonesia, Malaysia, Sri Lanka and Thailand were successful during that period. The growth rates and episodes of fiscal consolidation of individual country in the different time frames are given in Table 4.11 below.

Table 4.11, in general, confirms that strong commitment was more important than good timing for attaining success in fiscal consolidation. Had the good timing and higher growth rates been important, there should not have been any instances of success in the fiscal tightening initiated during 1981-85, when the region was severely affected by world recession as well as high international interest rates. Alternatively, the fiscal tightening efforts adopted during 1976-80 should have been unsuccessful. Moreover, there should not have been only one episode of successful fiscal tightening during 1991-96. The Table paints a similar picture if fiscal tightening adopted by the individual country in different time frames is taken into consideration. Some of the efforts appeared successful in Malaysia and Sri Lanka even though they were adopted during 1981-86 when their growth rates were at the lowest in all the time frames. Similarly, fiscal tightening in 1986-90 in the Philippines was not successful, even if its average annual growth rate was higher during the period. Several such examples could be cited from the Table to show that firm commitment is more important than good timing in order to achieve success in fiscal consolidation. Of course, the government would be hesitant to adopt fiscal restraint in the period of recession. If the economy is heading towards severe recession and the fiscal situation is under control, the government may adopt expansionary fiscal policy. However,

if the debt and/or fiscal deficits appear to be unsustainable, it might be better to start fiscal adjustments as soon as possible to avoid macroeconomic instability in the future.

**Table 4.11**  
**GDP GROWTH AND FISCAL CONSOLIDATION**

	1976-1980	1981-1985	1986-1990	1991-1995	Total
<i><b>Indonesia</b></i>					
Real GDP <sup>1</sup>	7.9	4.8	6.3	7.2	6.6
Fiscal Consolidation	2	2	2	0	6
of which Successful	0	0	2	0	2
<i><b>Korea</b></i>					
Real GDP <sup>1</sup>	7.6	8.4	10.0	7.5	8.4
Fiscal Consolidation	1	1	0	2	4
of which Successful	0	0	0	0	0
<i><b>Malaysia</b></i>					
Real GDP <sup>1</sup>	8.6	5.2	6.9	8.7	7.4
Fiscal Consolidation	1	3	2	0	6
of which Successful	0	1	2	0	3
<i><b>Philippines</b></i>					
Real GDP <sup>1</sup>	6.2	-1.3	4.7	2.2	3.0
Fiscal Consolidation	0	3	1	3*	7
of which Successful	0	0	0	0	0
<i><b>Singapore</b></i>					
Real GDP <sup>1</sup>	8.6	6.3	8.5	8.6	8.0
Fiscal Consolidation	1	2	2	1	6
of which Successful	0	0	0	1	1
<i><b>Sri Lanka</b></i>					
Real GDP <sup>1</sup>	5.5	1.0	3.4	5.4	3.8
Fiscal Consolidation	1	4	1	1	7
of which Successful	0	1	1	0	2
<i><b>Taiwan</b></i>					
Real GDP <sup>1</sup>	10.6	6.8	9.1	6.7	8.3
Fiscal Consolidation	n.a	0	0	3*	3
of which Successful	n.a	0	0	0	0
<i><b>Thailand</b></i>					
Real GDP <sup>1</sup>	8.0	5.4	10.4	8.4	8.1
Fiscal Consolidation	0	3	4	0	7
of which Successful	0	0	4	0	4
<i><b>All Countries</b></i>					
Real GDP <sup>1</sup>	7.9	4.6	7.4	6.8	6.7
Fiscal Consolidation	6	18	12	10	46
of which Successful	0	2	9	1	12

<sup>1</sup> Annual average growth rate of real GDP.

\* Of these fiscal tightening, 1 for the Philippines and 2 for Taiwan could not be identified as successful or unsuccessful due to the fact that data after the tight fiscal policy periods were not available.

Table 4.11 shows that only one out of seven identifiable adjustments (Singapore 1992) emerged successful during 1991-95. It is a clear indication of relaxation in fiscal tightening efforts. The strong commitment to fiscal consolidation during the latter half of 1980s resulted in reduced debt to GDP ratios in many countries in 1990s. At the same time, revenue growth was stronger mainly as a result of high economic growth and a rise in non-tax revenue through privatisation receipts rather than improvement in tax revenue to GDP ratio. The steady increase in government revenue and the calls for more public spending especially on infrastructure, human capital and social security, thus contributed to the reduced number of successful episodes during the period.

Table 4.12 reports the macroeconomic indicators during the fiscal consolidation period of 1986-96. Based on these indicators, it appears that the direction of the macroeconomic effects of both successful and unsuccessful consolidations during 1986-96 is the same as the full study period of 1975-96. In this sub-period, the growth was even higher in the successful adjustments than during the unsuccessful ones, which again was investment driven. Inflation also remained moderate, although accelerating especially after the consolidation. On the other hand, inflation seems to moderate for the unsuccessful cases.<sup>27</sup>

The real interest rates were again positive in both successful and unsuccessful cases. However, while the gaps between successful and unsuccessful periods narrowed in comparison to the whole period of 1975-96, the rates were on a decreasing trend in both cases as opposed to the increasing trend observed during the whole period.

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<sup>27</sup> This seems purely an outcome of monetary policy because of greater adherence to the commitment for reducing/eliminating the recourse to central bank to finance budget deficits especially from mid-1980s onward when most of the countries in the region adopted fiscal consolidation as a part of structural adjustment. Thus, during this period, governments were committed to pay back the central bank loans even by borrowing from other sources including commercial banks.



**Table 4.12**  
**MACROECONOMIC EFFECTS OF FISCAL CONSOLIDATION**  
**(1986-96)**

	Types of Fiscal Actions	Before <sup>a</sup>	During <sup>b</sup>	After <sup>c</sup>
<b>Real GDP<sup>1</sup></b>	Fiscal consolidation	6.1	6.4	7.9
	Successful	6.3	7.6	9.4
	Unsuccessful	5.9	5.2	6.2
<b>Private Investment<sup>2</sup> (Annual Average Percentage Change)</b>	Fiscal consolidation	11.8	20.1	24.1
	Successful	12.0	23.1	29.0
	Unsuccessful	11.5	16.8	18.7
<b>Private Consumption (Annual Average Percentage Change)</b>	Fiscal consolidation	11.0	12.7	14.9
	Successful	7.3	12.5	16.7
	Unsuccessful	15.2	13.0	12.9
<b>Real Interest Rates<sup>3</sup></b>	Fiscal consolidation	5.0	4.3	3.9
	Successful	6.3	5.2	4.8
	Unsuccessful	3.6	3.3	3.0
<b>Inflation<sup>4</sup></b>	Fiscal consolidation	5.7	5.7	6.4
	Successful	4.1	4.7	6.4
	Unsuccessful	7.5	6.7	6.4
<b>Net Exports as Percent of GDP</b>	Fiscal consolidation	-1.9	-1.4	-2.8
	Successful	0.6	0.9	-0.8
	Unsuccessful	-4.7	-4.0	-5.1

Sources: IMF *International Finance Statistics*, SEACEN *Financial Statistics*; and Taiwan *Statistical Data Book*.

<sup>a</sup> One year before consolidation.

<sup>b</sup> During consolidation.

<sup>c</sup> One year after consolidation.

<sup>1</sup> Annual average growth rate of real GDP.

<sup>2</sup> Annual rate of growth of private investment defined as gross fixed capital formation minus capital expenditure of the government.

<sup>3</sup> Deposit rates minus inflation (deposit rates are extracted from IFS country page line 60L. If such deposit rates are not available, three months deposit rates taken from SEACEN *Financial Statistics* are used).

<sup>4</sup> Annual average percentage change in consumer price index.

### 4.3 Sensitivity of the Results

To test the sensitivity of the results, the definition of success was relaxed as follows:

Three years after the tight period, either the ratio of cyclically adjusted primary balance over GDP is on the average at least 1 percent of GDP below the

year of tight period, or the debt to GDP ratio is 2 percent of GDP below the initial level.<sup>28</sup>

Table 4.13 lists the successful episodes according to this definition. In this case, the number of successful consolidations increased by more than double to 26.

**Table 4.13**  
**SUCCESSFUL FISCAL CONSOLIDATION**  
(Based on Alternative Definition of Success)

Country	Successful
Indonesia	1982, 1987 and 1990
Korea	1983, 1992 and 1993
Malaysia	1983, 1984, 1987 and 1988
Philippine	1983, 1984, 1987 and 1991
Singapore	1982, 1988 and 1992
Sri Lanka	1981, 1982, 1983 and 1989
Taiwan	1993
Thailand	1986, 1987, 1988, and 1989

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

### 4.3.1 Success and Composition

**Table 4.14**  
**SUCCESSFUL AND UNSUCCESSFUL FISCAL CONSOLIDATION:**  
**EXPENDITURE AND REVENUE**  
(Based on Alternative Definition of Success)

	Number of Observations	Change in Primary Balance	Primary Expenditures	Revenues
Successful Adjustments	26	-2.82	-2.67	0.15
Unsuccessful Adjustments	17	-2.67	-1.60	1.07

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

All the variables are changes of ratios over GDP.

<sup>28</sup> Symbolically, a tight fiscal policy in period  $t$  is successful if:  
either, (i)  $1/3 [\text{cpb}(t+1) + \text{cpb}(t+2) + \text{cpb}(t+3)] \leq \text{cpb}(t) - 1$ , or  
(ii)  $\text{dgdpr}(t+3) - \text{dgdpr}(t) \leq -2$   
where,  $\text{cpb}$  is cyclically adjusted primary balance as percent of GDP; and  $\text{dgdpr}$  is government debt as percent of GDP.

Despite the substantial increase in the number of successful cases, qualitatively the results are similar to those reported in Table 4.5. Larger adjustments are more likely to be successful than the smaller ones. Similarly, successful adjustments are the consequence of larger cuts (almost 95 percent) in expenditure rather than raising revenues.

In contrast to Tables 4.6 and 4.7, Tables 4.15 and 4.16 report composition of expenditure cuts according to the alternative definition. In general, it appears that direction of cuts in different components of expenditures between successful and unsuccessful adjustments is similar.

**Table 4.15**  
**SUCCESSFUL AND UNSUCCESSFUL FISCAL ADJUSTMENTS:**  
**COMPOSITION OF EXPENDITURE CUTS**  
*(Based on Alternative Definition of Success)*

	No. of Observations	Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	26	-2.67	-1.09	-0.23	-0.41	-0.45	-1.58
Unsuccessful Adjustments	17	-1.60	0.08	0.08	-0.10	0.10	-1.68

Sources: IMF Government Finance Statistics and responses from member central banks and monetary authorities.

All the variables are changes of ratios over GDP.

**Table 4.16**  
**SUCCESSFUL AND UNSUCCESSFUL FISCAL CONSOLIDATION:**  
**COMPOSITION OF EXPENDITURE CUTS AS PERCENT OF TOTAL CUTS**  
*(Based on Alternative Definition of Success)*

	No. of Observations	Total Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	26	100	40.8	8.6	15.4	16.8	59.2
Unsuccessful Adjustments	17	100	-5.0*	-5.0*	6.3	-6.3*	105.0

Shares are derived from Table 4.15 above.

\* Indicates annual average increases in the respective expenditure components

The experience of the successful adjustments show that even though one cannot avoid cutting capital expenditures, more drastic actions need to be taken towards cutback on current expenditures in every component, not only subsidies and current transfers.

Tables 4.17 and 4.18 display the composition of tax increases. In cases of successful adjustment, increases in total revenue appear to be not significant, as it rose by just 0.15 percent of GDP, as against the higher increase of 1.07 percent in the unsuccessful cases.

**Table 4.17**  
**SUCCESSFUL AND UNSUCCESSFUL FISCAL CONSOLIDATION:**  
**COMPOSITION OF INCREASES IN REVENUE**  
*(Based on Alternative Definition of Success)*

	No. of Observations	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on International Trade	Other Taxes	Non-Tax Revenues
Successful Adjustments	26	0.15	0.07	0.24	0.05	0.04	-0.25
Unsuccessful Adjustments	17	1.07	0.35	0.19	0.16	0.08	0.29

Source: Same as other tables above.

All variables are changes of ratios over GDP.

**Table 4.18**  
**SUCCESSFUL AND UNSUCCESSFUL FISCAL CONSOLIDATION:**  
**COMPOSITION OF TAX INCREASES AS PERCENT OF TOTAL TAX INCREASES**  
*(Based on Alternative Definition of Success)*

	No. of Observations	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on International Trade	Other Taxes	Non-Tax Revenues
successful adjustments	26	100	46.7	160.0	33.3	26.7	-166.7
unsuccessful adjustments	17	100	32.7	17.7	15.0	7.5	27.1

Source: Same as other tables above.

Computation from Table 4.17.

Apart from the alternative definition of 'success' as reported above, several other definitions including the one used by Alesina and Perotti (1996) were also attempted, with strikingly similar results. The results obtained by

using the definition of Alesina and Perotti in their study of the OECD fiscal adjustments are presented in Appendix 'A' for reference. In Appendix 'B', the outcome of the fiscal actions by relaxing the definition of 'tight consolidation' but keeping the definition of success as used by Alesina and Perotti is presented. Similarly, Appendix 'C' provides analysis on the tight fiscal policy of the SEACEN countries, following Alesina and Perotti (1996) definition. Based on the results of several combinations of different definitions of 'tight' and 'success', the study results reported above could be generally described as robust.

## Chapter 5

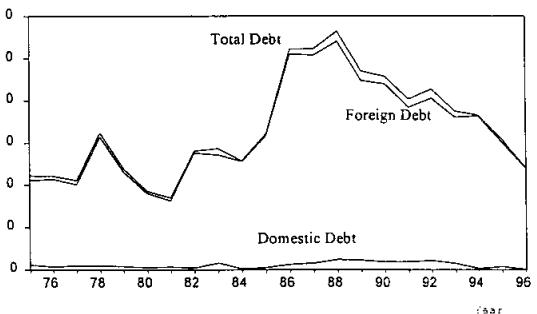
### FISCAL POLICY AND THE CURRENT ECONOMIC CRISIS

Generally the fiscal situation was not problematic before the onset of the present economic turmoil. In fact, many of the crisis hit economies ran fiscal surpluses with steady improvement in government debt in general and foreign debt in particular as a consequence of strong fiscal tightening during the latter part of 1980s [see Figures 5.1 and 5.2].

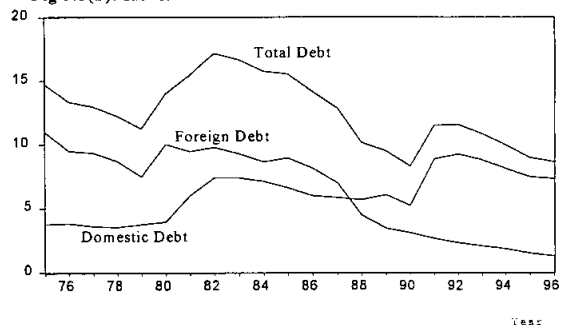
For example Thailand, where the crisis originated, had run fiscal surpluses since 1988. It had been successful in reducing its debt to 3.6 percent of GDP in 1996 from more than 35 percent in 1986. Similarly, Malaysia and Indonesia were also successful in reducing their debt to GDP ratios substantially. Even the Philippines was able to contain its debt to GDP ratio to 53 percent of GDP in 1996 from more than 61 percent in 1995. The debt to GDP ratio of Korea, being historically low by regional standard, reduced substantially to less than one-tenth of GDP owing, while debt to GDP ratio in Nepal decreased to 62.2 percent in 1996, compared with an annual average of about 66 percent during 1991-95.

**Figure 5.1**  
**Debt to GDP Ratio**

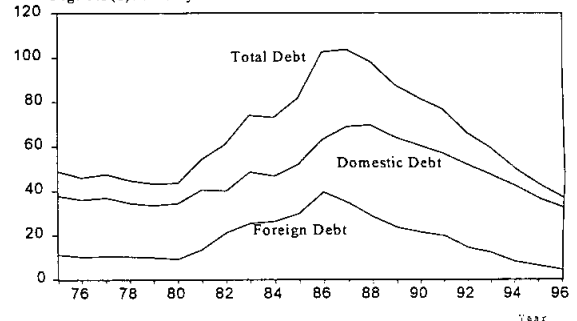
**Fig 5.1(a): Indonesia**



**Fig 5.1(b): Korea**



**Fig. 5.1(c): Malaysia**



As such, the fiscal sector cannot be blamed as a culprit for the crisis. Nevertheless, as mentioned earlier, fiscal consolidation during the 1990s were not as vigorous as in the latter part of 1980s, mainly due to relaxation in expenditure adjustment while the revenue side was also not encouraging. Compared with more stringent adjustments during the 1980s, some relaxation in government spending could have been justifiable, had it been financed by concomitant rise in revenue. But the revenue efforts before the onset of the crisis were not promising as shown by the almost constant or even reduced share of revenue as percent of GDP in the few years preceding the crisis [see Figures 5.2(a) to 5.2(h) below].

The trends in several SEACEN countries indicate a steady decline of revenue to GDP ratios, particularly the tax revenues to GDP ratios, even in the successful countries. Notwithstanding a rise in revenue in some of the member economies, on the whole the tax pressure ratio (revenue over GDP) of these countries were considered low (see also relevant tables and analysis in Chapter 2).

Fig 5.1(d): Nepal

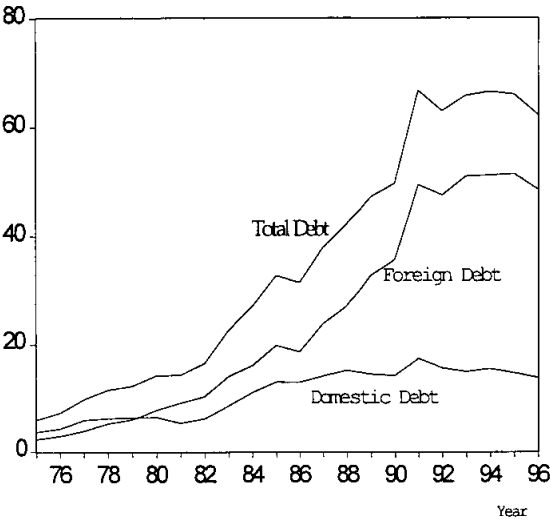


Fig. 5.1(e): Philippines

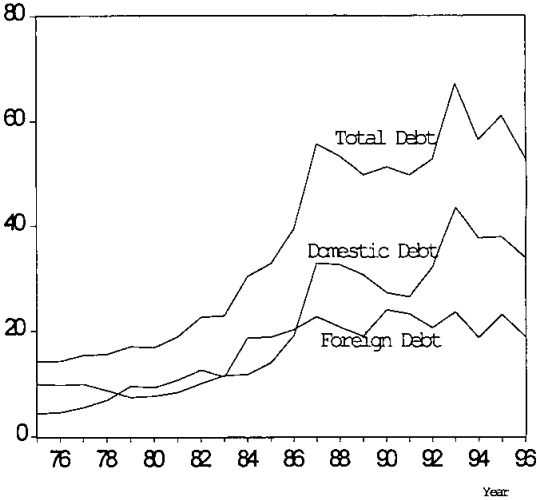
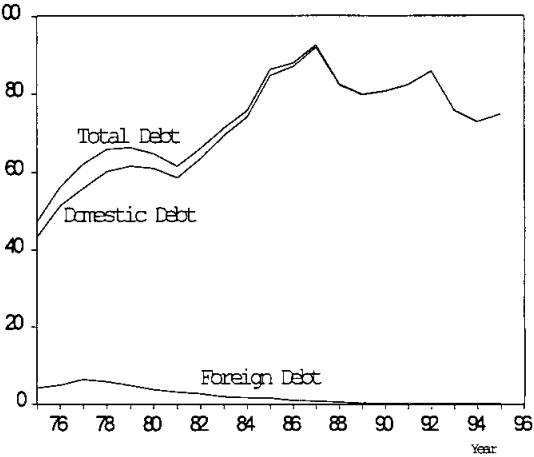


Fig. 5.1 (f): Singapore



Despite explicit policy aimed at enhancing revenue mobilisation through tax reform measures, the achievement seems less than satisfactory. One of the main reasons might be reduction in tax rates, even sharp cuts in some cases. In the global context, this might be in line with the general trend towards lower tax rates and could be beneficial if the consequence of shortfall in revenue collection were compensated by the rise in revenue through tax reforms. In the initial years of reforms, when the tax rates were relatively high, it is logical bring them down even by forgoing some revenue in the short run. The ultimate objective, however, should be guided by maximisation of revenue. However, this does not seem to be the case in several SEACEN economies, where the revenue to GDP ratios were either constant or even declining in the few years preceding the crisis, in spite the tax reform measures that were initiated more than a decade ago.

This seems to indicate that either the efforts to enhance revenue through tax simplification and broadening of tax base were inadequate, or the magnitude of cuts in tax rates were too steep, or the combination of both.

Fig. 5.1 (g): Sri Lanka

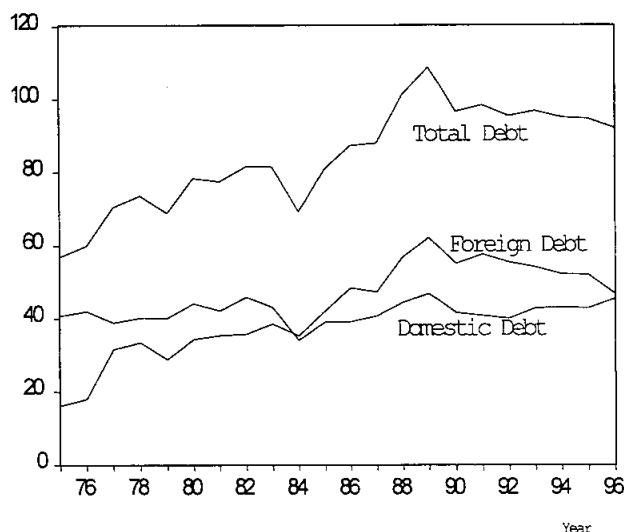


Fig. 5.1 (h): Taiwan

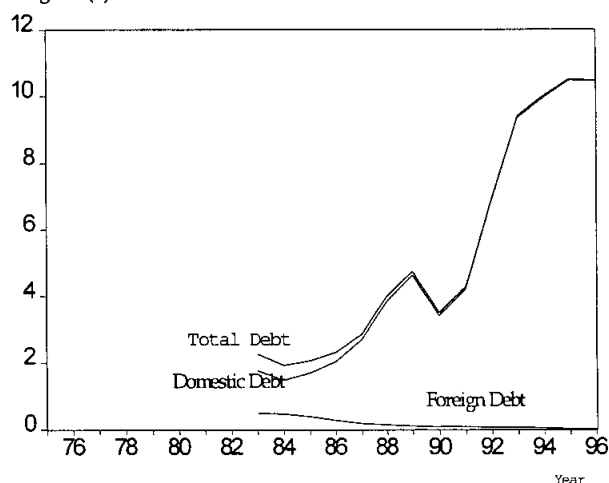
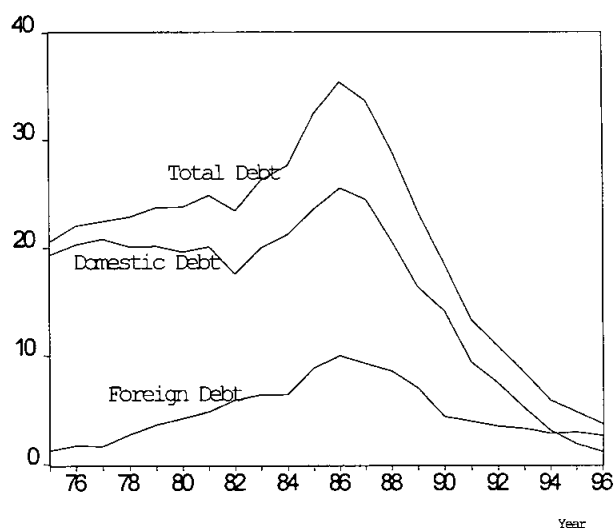


Fig. 5.1 (i): Thailand





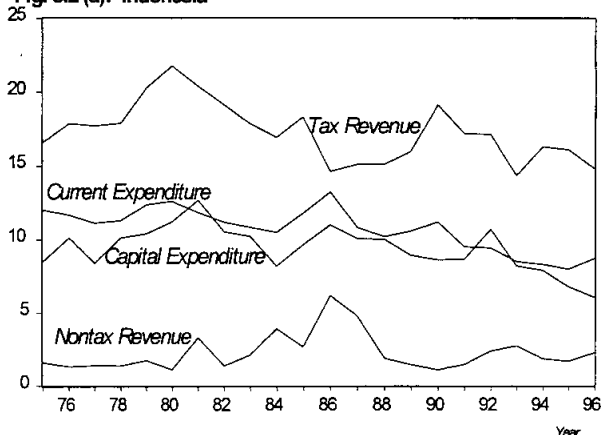
Notwithstanding the declining trends in tax pressure ratios in several SEACEN economies, the tax rates were steadily cut to levels that were even lower than in many other countries including some of the developed ones.

For example, the marginal income tax rates for individual as well as corporate tax rates were lower in the SEACEN region than that in Japan (Table 5.1). In addition, tax incentives to private sector investment and consumption in several countries were provided without considering likely distortionary impact on private sector decisions, in the liberalised context.

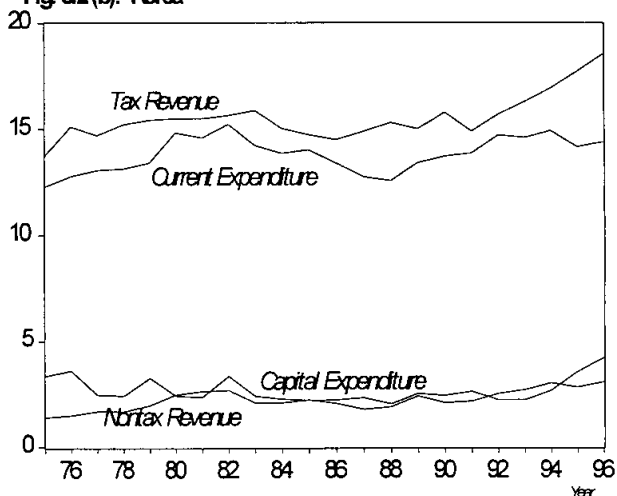
Stimulating fiscal policy can be justified in bad times but not in a period when the economy has been growing rapidly for several years, exceeding the potential growth in many cases. Apart from this, true fiscal positions were not as tight as they appeared to be because of extra-budgetary and quasi-fiscal operations in some cases.<sup>29</sup>

**Figure 5.2**  
**Government Revenues and Expenditures**  
(% of GDP)

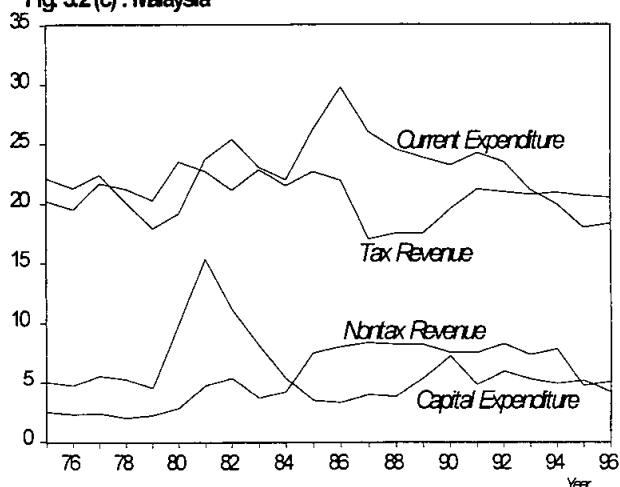
**Fig. 5.2 (a): Indonesia**



**Fig. 5.2 (b): Korea**



**Fig. 5.2 (c): Malaysia**



<sup>29</sup> See *World Economic Outlook*, Interim Assessment, International Monetary Fund, December 1997. In the light of the recent economic crisis experienced by a majority of the SEACEN members where government directed lending together with explicit or implicit government guarantees have had serious repercussions on the banking system, analysis of such extra-budgetary operations could be considered as an essential part of the study. Because of data constraints, however, we could not do so.

Based on the success in fiscal consolidation during the late 1980s and its positive impact on the economy, the region should have continued its efforts and further consolidate the fiscal position. This would have, to some extent, contained the rise in private sector liquidity brought about by sharp inflows of foreign capital during the period before crisis, and consequently the external current account deficits. This is more important in case of the SEACEN countries where Ricardian equivalence holds only partially (Hong, 1998). Since the private sector saving is not crowded out to the extent of a rise in government savings, a rise in government saving helps to increase national saving in the SEACEN countries. Furthermore, with a strong fiscal position, the crisis hit countries would have been able to stimulate their economies by adopting more expansionary fiscal policy with least adverse impact on macroeconomic balance and come out of the present economic crisis relatively more quickly.

Fig. 5.2(d) : Philippines

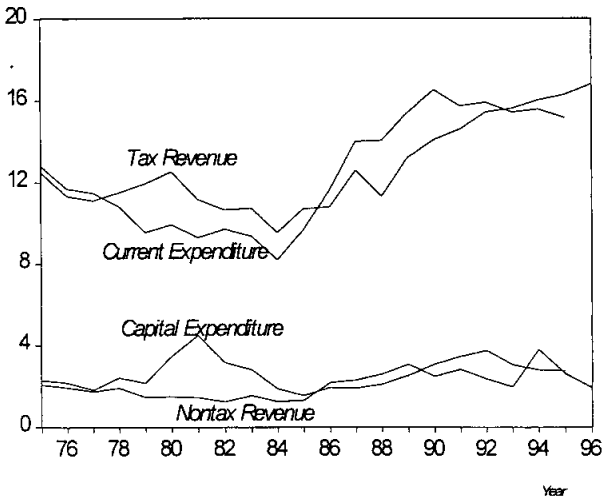


Fig. 5.2 (e) : Singapore

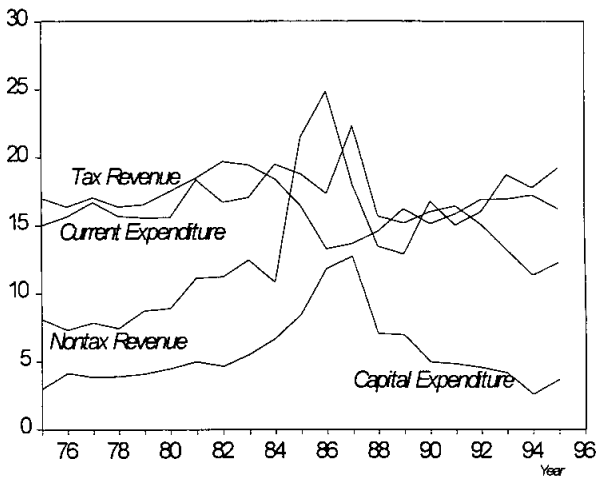
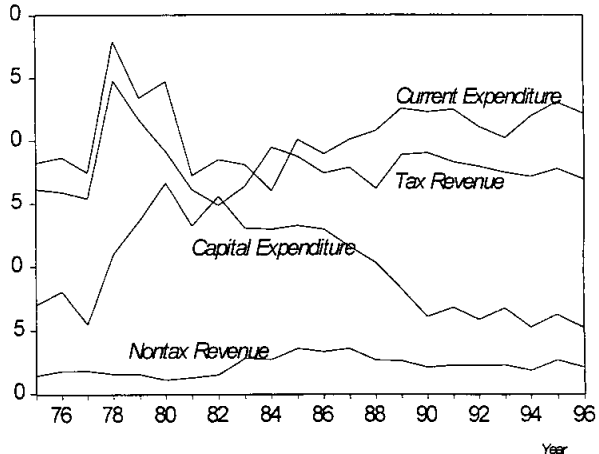


Fig. 5.2(f) : Sri Lanka



Thus, though the fiscal sector was not directly responsible for the emergence of the 1997 economic crisis in the region, its developments before the crisis suggest that it might have exacerbated the crisis. While it was not necessary to provide tax incentives with a view of boosting the domestic demand, which was already high, more fiscal saving should have been accumulated for rainy days such as during the crisis. The focus of adjustment, however, should have been on the revenue side. This seems contradictory to one of our findings -- fiscal consolidations concentrating on increases in revenue are unlikely to be successful. This is true if a government tries to raise revenue by levying exorbitant tax rates and/or depending on temporary sources, but if the efforts were directed towards more sustainable sources/basis, it would be helpful in making fiscal consolidation successful.

Fig 5.2(g): Taiwan

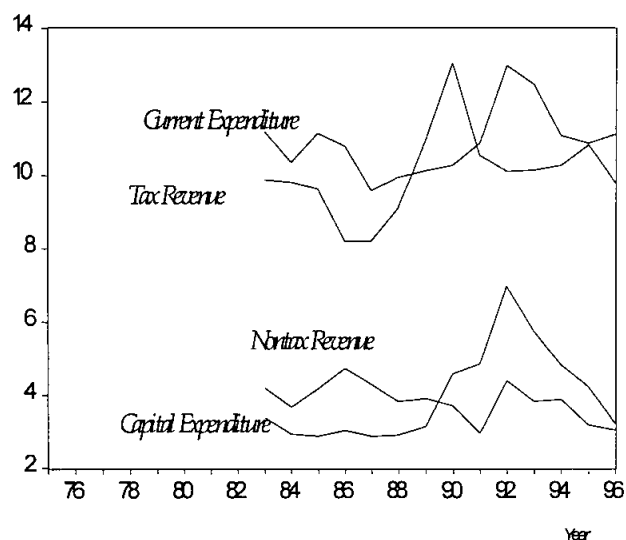
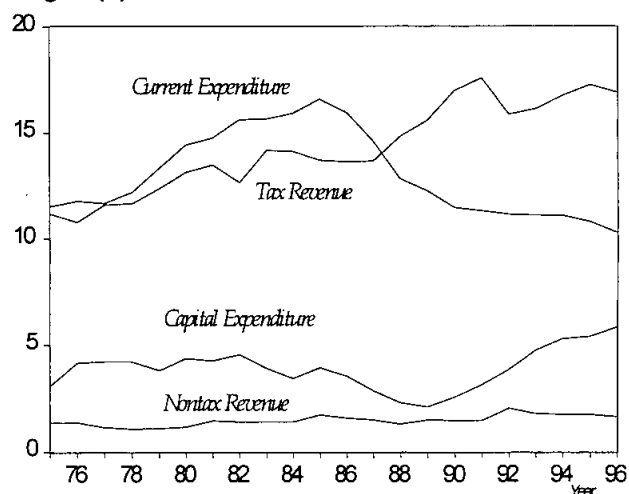


Fig 5.2(h): Thailand



**Table 5.1**  
**MAXIMUM RATES OF INDIVIDUAL AND CORPORATE INCOME TAX**  
*(In percent)*

Countries	Individual Income Tax Rates			Corporate Tax Rates		
	1985	1991 <sup>1</sup>	1996	1985	1991 <sup>1</sup>	1996
Indonesia	35	35	30	35	35	30
Korea	55	50	45	30	34	30
Malaysia	40	35	32	n.a.	35	30
Nepal	55	50	33	55	50	33
Philippines	n.a.	35	35	n.a.	35	35
Singapore	40	33	28	40	31	26
Sri Lanka	50	40	35	50	50	45
Thailand	n.a.	55	37	n.a.	35	30
Japan			65			46

**Sources:** Responses from member central banks and monetary authorities as well as other publications including newspapers.

<sup>1</sup> Extracted from *Asian Development Review* (1991), Vol. 9, No. 2.

## Chapter 6

### CONCLUSIONS AND POLICY IMPLICATIONS

The analysis suggests that fiscal tightening does not necessarily cause recession to an economy in the long run as rise in private activities may outweigh the fiscal contraction. In fact bold and decisive fiscal consolidation can create conducive environment for higher growth by enhancing private sector confidence, which has been the main engine of growth. Our findings support the view of Giavazzi and Pagano (1990) that sharp reduction in fiscal deficits might help an economy to be better off not only in the long run but also during the period of fiscal consolidation because of positive expectation. Based on the generally accepted definition, fiscal consolidation in the SEACEN has been generally successful, as many countries have succeeded not only in reducing fiscal deficits (even achieving fiscal surplus in some countries) or lowering debt burden, but also in achieving higher growth.

The results also suggest the importance of size and composition of fiscal adjustment. The bigger the size of adjustment, the better was the performance of an economy. The region's economic performance during larger adjustments appeared more satisfactory than during the period of smaller adjustments. This could be the outcome of the crowding in as well as positive expectation effect. Even the external sector, which was the problematic area of many countries in the region, performed relatively better during the period of sharp adjustments. Regarding the composition, the results suggest that fiscal adjustment focusing on the expenditure side is more likely to succeed in reducing debt to GDP ratio than that concentrating on raising revenue. This is mainly due to the fact that improvement in fiscal balance caused by a rise in non-tax revenue is not sustainable. However, if the improvements are from the rise in income tax, taxes on goods and services, and other taxes, they may be sustainable. On the expenditure side, adjustments based on cutting different components of current

expenditure, especially wage bill and other purchases of goods and services, appeared to be successful as opposed to a cut in capital spending.

The results also indicate the importance of timing as reflect in very few successful episodes during the first part of the 1980s, when the region was generally affected by the world recession as well as high global interest rates. However, the size of adjustments and its composition appear to be the dominant determinant of the outcome suggesting that if a country is facing a serious debt/deficit problem it should not wait for favourable timing for pursuing fiscal consolidation. Of course a country can avoid trying to initiate fiscal restraint during severe economic slowdown, provided that the deficit/debt ratios are within sustainable limit.

In general, the main findings generally corroborate the views of several other recent studies of both developed and developing countries. For example, the conclusions are similar to those derived from studies on OECD fiscal adjustments by Alesina and Perotti (1996), and McDermott and Wescott (1996). That is, fiscal consolidations relying primarily on cutting current expenditure (especially other purchases of goods and services and wages and salaries) are more likely to be successful in reducing deficits/debt to GDP ratios. On the contrary, fiscal consolidation relying primarily on curtailing capital spending and revenue increases (mainly non-tax revenue) would tend to be short lived.

Though higher adjustment in current expenditure has played greater role in making the SEACEN fiscal consolidation successful, where success is defined as putting debt to GDP ratio on a sustained downward trend, proportion of cuts in capital spending was also higher. Given the importance of public spending for infrastructure, human capital and social security system, continuation of cuts in capital spending may not be sustainable. With the on-going economic crisis, it might not be feasible to scale down expenditure further, particularly capital expenditure. Even if there is still room for reducing current expenditure through such measure as austerity drive and administrative reforms, it will not be

sufficient, especially against the background that debt to GDP ratios of some SEACEN countries are still considerably high. Consequently, raising the revenue is most important in ensuring the success of fiscal consolidation to avoid similar fiscal problems experienced in the early 1980s. While it may be difficult to increase revenue by raising tax rates when similar rates are globally on the downward trend, especially during such a vulnerable period as economic crisis, it would be necessary to bear in mind the need to raise the revenue when the crisis is overcome. The emergence of the 1997 economic crisis clearly suggests that low tax rate alone is not sufficient for competitive advantage. Other factors such as relatively cheap labour and sound economic policy are more important. Given the adoption of low tax rate policy, the region may need to be more pragmatic and try to enhance revenue collection to the maximum extent possible. This is also important from the equity point of view. Given the relatively lower tax pressure ratio in many countries and a large reduction in tax, there seems to be scope for more revenue mobilisation. This, however, calls for greater efforts on the part of the government to intensify the ongoing tax reform measures such as broadening the tax base, expanding the tax net by identifying possible sources, strengthening revenue administration, curtailing concessions and incentives, etc. It is also important to enhance the elasticity of the tax system for every country in the region, particularly those with low tax pressure ratio.

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## ***APPENDICES***

## APPENDICES

### A. Definition of Success as Used by Alesina and Perotti (1996) in Their Study on OECD Fiscal Adjustment

Either three years after the tight period the ratio of the cyclically adjusted primary deficit over GDP is on the average at least 2 percent of GDP below the year of the tight year, or three years after the tight period the debt to GDP ratio is 5 percent of GDP below the year of tight period.

Symbolically:

- (i)  $\frac{1}{3} \text{cpb}[(t+3)+(t+2)+(t+1)] \leq \text{cpb}(t)-2$ , or
- (ii)  $\text{dgdpr}(t+3) - \text{dgdpr}(t) \leq 5$

Where,  $\text{cpb}$  = Cyclically adjusted primary balance as percent of GDP;  
 $\text{dgdpr}$  = Government debt as percent of GDP.

#### Appendix A.1

#### FISCAL CONSOLIDATION: EXPENDITURES AND REVENUE

	Number of Observations	Change in Primary Balance	Primary Expenditures	Revenues
Successful Adjustments	18	-3.00	-3.29	-0.29
Unsuccessful adjustments	25	-2.59	-1.49	1.10

Source: Computed on the basis of same data source stated in other tables above.

All the variables are changes of ratios over GDP.

#### Appendix A.2

#### SUCCESSFUL AND UNSUCCESSFUL ADJUSTMENTS: COMPOSITION OF EXPENDITURE CUTS

	No. of Observations	Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	18	-3.29	-1.42	-0.35	-0.55	-0.52	-1.87
Unsuccessful Adjustments	25	-1.49	-0.06	0.07	-0.10	-0.03	-1.43

Source: Same as in other tables above.

All the variables are changes of ratios over GDP.

Components may not add up due to rounding.

### Appendix A.3

#### COMPOSITION OF EXPENDITURE CUTS AS PERCENT OF TOTAL CUTS

	No. of Observations	Total Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	18	100	43.2	10.6	16.7	15.8	56.8
Unsuccessful Adjustments	25	100	4.0	-4.7*	6.7	2.0	96.0

Shares computed on the basis of Appendix A.2 above.

\* Indicates annual average increases in the respective expenditure components.

### Appendix A.4

#### SUCCESSFUL AND UNSUCCESSFUL CONSOLIDATION: COMPOSITION OF INCREASES IN REVENUES

	No. of Observations	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on International trade	Other Taxes	Non-Tax Revenues
Successful Adjustments	18	-0.29	0.03	0.26	-0.13	0.03	-0.48
Unsuccessful Adjustments	25	1.10	0.29	0.19	0.25	0.08	0.29

Source: Same as other tables above.

All variables are changes of ratios over GDP.

#### **B. Outcome of the Fiscal Actions under the Relaxed Definition of Tight Fiscal Policy**

The relaxed definition of tight policy:

A country's fiscal policy in a given year is 'tight' when primary balance as percent of GDP falls by more than national average minus half of a standard deviation, or a period of two or more consecutive years in which such primary balance falls by more than national average minus one-fourth of a standard deviation

Under this definition the following years of the respective countries' fiscal policy emerged as tight.

**EPISODES OF FISCAL CONSOLIDATION**

Country	Years of Tight Fiscal Policy
Indonesia <sup>1</sup>	1977,1979,1982,1984,1987,1989,1990,1993
Korea <sup>1</sup>	1980,1982,1983,1985,1986,1992,1993
Malaysia <sup>1</sup>	1979,1983,1984,1985,1987,1988,94
Philippines <sup>2</sup>	1979,1983,1984,1985,1987,1991,1992,1994
Singapore <sup>2</sup>	1977,1982, 1984,1988,1989,1992,1993
Sri Lanka <sup>1</sup>	1977,1981,1982,1983,1984,1989,1990,1992
Taiwan <sup>3</sup>	1989,1990,1993,1994,1995
Thailand <sup>1</sup>	1981,1983,1984,1986,1987,1988,1989,1990

<sup>1</sup> Data from 1975 to 1996.<sup>2</sup> Data from 1975 to 1995.<sup>3</sup> Data from 1983 to 1996.

Calculations are based on data published in the Government Finance Statistics of IMF and those supplied by member central banks and monetary authorities.

When we relaxed the definition, the number of tight fiscal policy increased to 58 from the 46 according to our previous definition. The fiscal performance under this definition is given below.

*Appendix B.2***TIGHT FISCAL POLICY: PRIMARY EXPENDITURES AND REVENUE**

	Number of Observations	Primary Balance	Primary Expenditures	Revenues
All Sample	158	-0.23	-0.08	0.15
Tight	58	-2.32	-1.84	0.48

Source: Computed by utilising the same data as stated above.

All variables are changes of ratios over GDP.

*Appendix B.3***SUCCESSFUL FISCAL CONSOLIDATION<sup>1</sup>**

Country	Successful
Indonesia	1982,1987,1990, and 1993
Korea	1985
Malaysia	1983,1984,1987 and 1988
Philippines	1984
Singapore	1988 and 1992
Sri Lanka	1981,1982 and 1989
Thailand	1986,1987,1988,1989 and 1990

Calculations are based on data published in the Government Finance Statistics of IMF and those supplied by member central banks and monetary authorities

<sup>1</sup> The 'success' is defined as in Appendix 'A' above.

#### Appendix B.4

### FISCAL CONSOLIDATION: EXPENDITURES AND REVENUE<sup>1</sup>

	Number of Observations	Change in Primary Balance	Primary Expenditures	Revenues
Successful Adjustments	20	-2.71	-3.02	-0.32
Unsuccessful Adjustments	34	-2.13	-1.21	0.92

Source: Computed on the basis of same data source stated in other tables above.

All the variables are changes of ratios over GDP.

<sup>1</sup> The same definition of success as given in Appendix 'A' above.

Notes: 1) Four episodes could not be identified as successful or on successful because figures for three years after the period of tight policy are not available.  
2) Components may not add up due to rounding.

#### Appendix B.5

### SUCCESSFUL AND UNSUCCESSFUL ADJUSTMENTS: COMPOSITION OF EXPENDITURE CUTS

	No. of Observations	Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	20	-3.02	-1.28	-0.32	-0.34	-0.62	-1.74
Unsuccessful Adjustments	34	-1.21	-0.14	0.03	-0.13	-0.04	-1.08

Source: Same as in other tables above.

All the variables are changes of ratios over GDP.

Note: Components may not add up due to rounding.

#### Appendix B.6

### COMPOSITION OF EXPENDITURE CUTS AS PERCENT OF TOTAL CUTS

	No. of Observations	Total Primary Expenditures	Total Current Expenditures	Wages & Salaries	Subsidies & Current Transfers	Other Purchases of Goods & Services	Capital Expenditures
Successful Adjustments	20	100	42.4	10.6	11.3	20.5	57.6
Unsuccessful Adjustments	34	100	11.6	-2.5*	10.7	3.3	89.3

Shares are computed on the basis Appendix B.5 above.

• Indicates annual average increases.

Note: Components may not add up due to rounding.

**SUCCESSFUL AND UNSUCCESSFUL CONSOLIDATION:  
COMPOSITION OF INCREASES IN REVENUES**

	No. of Observa- tions	Total Revenues	Income Tax	Taxes on Goods & Services	Taxes on Inter- national Trade	Other Taxes	Non-Tax Revenues
Successful adjustments	20	-0.32	-0.02	0.16	-0.13	0.05	-0.38
Unsuccessful Adjustments	34	0.92	0.27	0.20	0.15	0.09	0.22

Source: Same as other tables above.

All variables are changes of ratios over GDP.

Note: Components may not add up due to rounding.

**C. Tight Fiscal Policy According to the Definition Adopted by  
Alesina and Perotti (1996)**

A country's fiscal policy in a given year is tight, when cyclically adjusted primary balance falls by more than 1.5 percent of GDP or a period of two consecutive years in which such balance falls by at least 1.25 percent per year in both years.

This definition provides us following years as the tight policies of the respective countries:

Appendix C.1

**EPISODES OF FISCAL CONSOLIDATION**

Country	Years of Tight Policy
Indonesia <sup>1</sup>	1977,1984,1987,1990
Korea <sup>1</sup>	1980
Malaysia <sup>1</sup>	1978,1979,1983,1984,1985,1987,1988,1994
Philippines <sup>2</sup>	1983,1984,1985,1987,1991,1992,1994
Singapore <sup>2</sup>	1977,1982,1984,1988,1989,1992
Sri Lanka <sup>1</sup>	1977,1981,1982,1983,1984,1987,1989,1990,1992
Taiwan <sup>3</sup>	1993,1994,1995
Thailand <sup>1</sup>	1981,1983,1986,1987,1988,1989

<sup>1</sup> Data from 1975 to 1996.

<sup>2</sup> Data from 1975 to 1995.

<sup>3</sup> Data from 1983 to 1996.

Source: Calculations are based on data published in the *Government Finance Statistics* of IMF and those supplied by member central banks and monetary authorities.

Appendix C.2

**TIGHT FISCAL POLICY: PRIMARY EXPENDITURES AND REVENUES**

	Number of Observations	Primary Balance	Primary Expenditures	Revenue
All Sample	158	-0.23	-0.08	0.15
Tight	44	-2.83	-2.31	0.52

Source: Computed on the basis of same sources as stated above. All variables are changes of ratios over GDP.