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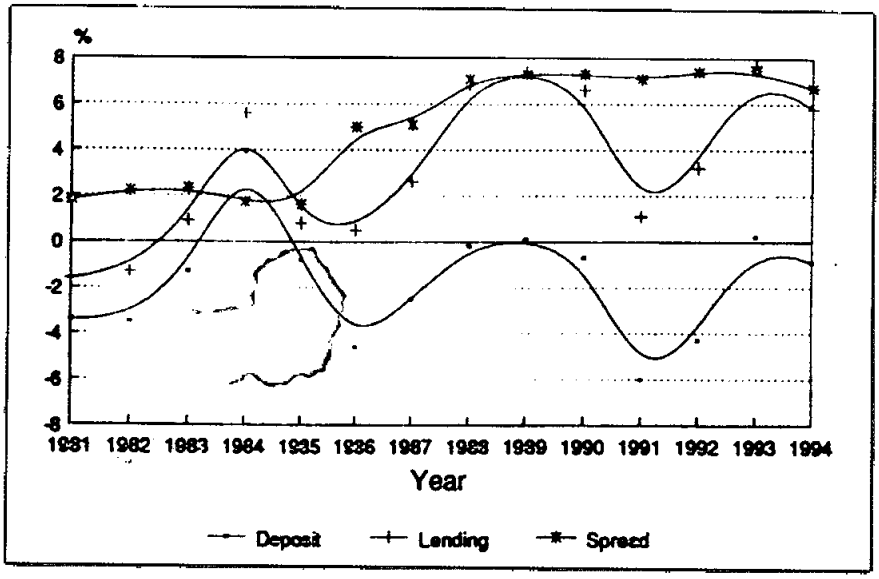
Implications on the Interest Rate Structure

by
Y. M. W. B. WEERASEKERA



THE SEACEN CENTRE

COMMERCIAL BANK MANAGEMENT OF LOAN AND DEPOSIT PORTFOLIO: IMPLICATIONS ON THE INTEREST RATE STRUCTURE

by
Y.M.W.B. Weerasekera

The South East Asian Central Banks(SEACEN)
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Kuala Lumpur, Malaysia

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FOREWORD

Lending rates in many SEACEN countries are believed to be very high and the commercial banks are operating with relatively wide spreads. It has been asserted that the large spreads are due to excessive profit margins kept by the banks. However, there may be other reasons for this phenomenon. Large spreads may be caused by government policies and regulations and due to operational inefficiencies of banks. For instance, a wedge between loan and deposit rates, at least for the non-privileged customers of banks, is created by the imposition of reserve requirements, and various forms of taxation, operation of directed credit programmes and a high level of inflation. In addition, high operating costs, large loan losses and, of course, large profits due to uncompetitive behaviour can be translated into wide interest rate spreads. Such large spreads and excessive costs of financial intermediation represent a major misallocation of resources.

It is extremely important for both policy-makers as well as commercial banks in the SEACEN countries to identify the causes of high lending rates and spreads and to find out whether large profits are a cause of the high rates so that they could consider whether or in what way it would be possible to maintain rates at levels that are conducive to sustaining high level of investment, savings and profits for the commercial banks. This study is a first attempt among SEACEN member banks to answer the foregoing issues. The decomposition of the lending rate into various components in a simple, yet sufficiently analytical framework, has enabled the study to identify the factors that cause high lending rates and spreads. It has also analysed the various elements in profit margins and their relationship with the spread. It suggests that the main causes of high lending rates are the high cost of funds arising mainly due to large reserve requirements, forced and/or priority lending programmes at below market rates, large administrative costs and large loan losses. The study does not find much support for the proposition that excessive profits made by commercial banks are a cause of high lending rates and spreads. According to the study, profits are made anyway with little relevance to the level of the lending rate.

This in-house study was carried out by Mr. Y.M.W.B. Weerasekera, Senior Economist seconded to The SEACEN Centre by the Central Bank of Sri Lanka. In preparation of the study, Mr. Weerasekera was assisted by Mr. Lee Ee Soon, Research Associate, and the later part by Mr. Koay

Keng Teik, Research Associate. A part of the manuscript was typed by Mrs. S.A.S.M. Padmasiri of the Central Bank of Sri Lanka and the balance parts by Mrs. Haslina bt. Muda and Ms. Karen How, both of The SEACEN Centre. The draft report was arranged for publication by Ms. Sally Ho Ngeok Ying of The SEACEN Centre. The Centre wishes to express its deepest appreciation to the member central banks and commercial banks who have provided much needed data and information as well as comments. Special mention must be made of the Bank of Korea, Bangko Sentral ng Pilipinas, and the Central Bank of China-Taipei, who assisted us in arranging the field visits for Mr. Weerasekera and the commercial banks of those three countries who very kindly agreed to meet with him to discuss various issues related to this study. The views expressed in this book, however, are those of the author and should not necessarily reflect those of the central banks, commercial banks or The SEACEN Centre.

Dr. Vicente B. Valdepeñas, Jr.
Director
The SEACEN Centre

Kuala Lumpur
June 1996

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Chapter 1

INTRODUCTION

1. Background

Management of the loan portfolio is the most important function in the operation of a commercial bank because it generates the bank's main source of revenue. The right composition of loan portfolio and 'loan pricing' are therefore crucial to sound portfolio management. Similarly, sound deposit management in the sense of reducing interest costs on deposits while attracting sufficient funds to the banking system is equally important in commercial bank financial management. In trying to achieve the twin objective of minimising cost of funds and maximising returns, it is asserted that, banks make unreasonably large profits by keeping large spreads for themselves.

In a fully liberalised environment, competition should reduce spreads and enhance efficiency. At the same time, the banks with relatively high operating costs will be gradually forced out of business or be subjected to major administrative and financial reforms. If the competition is thin and a few commercial banks dominate banking business, there is reason to believe that banks may attempt to manipulate the spread to increase profits. More intriguing would be a situation where, despite stiff competition from many local and foreign commercial banks, there exist very high lending rates and low deposit rates and large spreads.

If the deposit rates are lower than necessary, it would discourage savings; and, if the lending rates are higher than necessary, it would discourage investment. Since high levels of savings and investments are essential preconditions for a country's long-term economic growth, economies in the SEACEN countries cannot afford to ignore the question of high interest rate spreads.

2. Objective of Study

The interest rate has become a highly debated issue with a common view that banks are making excessively high profits at the expense of the borrowers and savers. Banks are alleged to maintain a

high spread by reducing the rate of return on savings at a faster pace than the lending rate. For instance, in situations where deposit rates have tumbled, banks have continued to charge high interest rates on loans. This view, however, has been disputed by the commercial banks. They argue that the high margin is necessary to cover the provision for bad loans, high operating costs and low returns on priority lending.

Several other factors have also been cited by the commercial banks for the existence of "so-called" large spreads between deposit and lending rates in developing countries. For instance, government policies and regulations such as reserve requirements, various forms of bank taxation and forced investment programmes as well as inflation, have frequently been blamed for the wide interest rate spreads.

To what extent do these factors influence the interest rate spreads in SEACEN countries, given the proposition that lower spreads are an indicator of commercial bank efficiency? Are the lending rates too high and/or deposit rates too low. What are the factors affecting deposit rates and loan rates in individual countries? Is there a substantial divergence between deposit and lending rates? Are large spreads a cause of large profits? What are the factors that lead to differences in spreads and what are the policies that can improve efficiency and reduce intermediation costs? These are some of the basic questions that might arise in trying to examine the issue. As such, the main objective of this study is to examine the causes of alleged high lending rates and spreads in the SEACEN countries.

3. Scope and Limitations of the Study

The title of this study implies an examination of the loan and deposit portfolio management of commercial banks. Such a study is impossible as data will not be available. What the study attempts to do, as evident from this chapter, is to examine the causes of high lending rates and spreads. This was in fact the original intention of the study as approved by the Board of Governors. Although the study had been approved as an in-house project, most of the data required were not available at The SEACEN Centre. For instance, given the objectives of the study as mentioned above, one needs to examine the components of the lending rate, i.e., the cost of funds and the spread preferably of a few commercial banks in each country. Understandably,

this is an area where the commercial banks are least willing to cooperate given the very confidential nature of the information required. Individual bank's cost of funds and the spread are probably the most confidential numbers and are limited to only a few top management people on a "need-to-know" basis. As such, the banks would not entertain requests for such data and do not even want to discuss any matter which they think would impinge on the bank's policy on confidentiality of data. Hence, it must be mentioned that, from the beginning, the study suffered from the difficulties in obtaining the required data.

Nonetheless, we were able to extract much of the aggregate level as well as at individual commercial bank level data through two simplified questionnaires sent to the member central banks. Questionnaire 1 (Central Bank) provides most of the information on the aggregate level while Questionnaire 2 (commercial banks) was designed to extract detailed information on the individual commercial bank level particularly from their income statements and balance sheets. Excellent support was shown by most of the member central banks and commercial banks in responding to the questionnaires. Bank Indonesia, The Bank of Korea, the Central Bank of Myanmar, Nepal Rastra Bank, Bangko Sentral ng Pilipinas, the Monetary Authority of Singapore, the Central Bank of Sri Lanka, The Central Bank of China, Taiwan,[1] and the Bank of Thailand had returned the completed questionnaires. Bank Negara Malaysia had referred us to various publications. The level of completion of the questionnaire, however, varied substantially across countries making a comparative analysis rather difficult. We were also able to visit several commercial banks and central banks in three countries, namely Korea, Philippines and Taiwan to supplement the data requested through the questionnaires. The project also benefited immensely from the discussions that we had with the senior level officers of the commercial banks as well as those of the central banks.

It was assumed that the deposit and lending rates of most of the SEACEN countries are, to a large extent, governed by those of the first few banks that dominate the financial market or that the rates of the first few banks represent those of the banking system. In some countries, the number of banks which account for the bulk of the banking

1. Throughout this study, 'Taiwan' means the Republic of China, Taipei.

business, say more than 50 percent of assets, is somewhat larger than in others. It is not possible nor practicable to gather data on all commercial banks and analyse the lending rates and spreads. Aggregation of data across banks also makes estimates less reliable and less realistic. Therefore, it is assumed that the study of some of the biggest banks will provide a better approximation of the situation rather than an aggregative study. Hence, we confined ourselves to the first few banks. We requested the member central banks to select either the first three commercial banks in terms of assets, or the largest banks accounting for about 60 percent of total assets of the commercial banking system as at end of 1993, whichever is higher, in accomplishing the questionnaires. However, it was noted from the responses received, that the number of banks required to make up 60 percent of assets varied from 3 in some countries to 5 in others and even 10 in one other country.

As the countries in our study are represented by varying number of banks, we face a major problem in making a comparative analysis. Further, although the criterion used was the first three banks in 1993, this definition could not be strictly adhered to in view of the lack of availability of data. Ranking of banks by the size of their assets alone was not appropriate because there can be many banks which are almost similar in assets but vary in terms of other criteria. This was quite evident in the case of Indonesian commercial banks. In such cases, we decided to take the first three banks as reported by the country concerned, however much it may seem arbitrary. In other cases, data may not be available in respect of one or two or three of the first three banks. We then had to take the banks for which data were available.

Secondly, a question arose as to which lending rates to be considered as there are many lending rates at each bank such as short-term, medium-term or long-term, average or base lending rate, purpose-wise or sector-wise, priority or non-priority sector-wise and so on. The answer is guided by the factors that cause the lending rates of the non-priority sector in general, to increase. The base lending rate (BLR) generally sets the other lending rates for the non-priority sectors. In cases, however, where BLR is not available, the average lending rate for the medium term, 1 to 2 years, may be used. This can be justified by the fact that in most of the SEACEN countries, the resources for lending are raised through the deposits with maturities up to two years.

Thirdly, a question arises as to how high is too high and relative to what? The answer can vary depending on the country specific situations. An important reference rate that takes into account most of the factors that determine the lending rates would be the "cost of funds". It would be possible to compare the lending rates with the cost of funds and find out whether large intermediation costs are causing high lending rates or whether cost of funds itself is the cause. Fourthly, it is hard to define excess profits as profit maximising is the main objective of any commercial enterprise. A plausible alternative would be to examine where the profits come from, i.e., from what operations? - whether from normal banking operations, from off-balance-sheet activities or from shareholders' intention to increase profit margins. Once the sources of profits are identified, it would be possible to study their implications on the interest rate structure.

The study aimed at examining the structure of lending and deposit rates as well as spreads that prevailed in 1993 and comparing it with the situation that existed some years ago. The year 1980 is a suitable starting point as many SEACEN countries have either just started to liberalise their financial markets or were just beginning to do so. By 1993, all SEACEN countries have undertaken some form of financial liberalisation. In all cases, the financial policies and institutions have undergone considerable change between these two years. This makes comparisons all the more important. For instance, one can ask what makes the lending rates and spreads higher or lower in the early 1990s than they were in the early 1980s? This would enable us to examine the link between the financial reforms and intermediation costs. However, there was a difficulty in sticking to the beginning year 1980, as data were not readily available. In such cases, we either used a year which is closest to 1980 or ignored the comparison altogether. In the case of the computation of the cost of funds, our focus was on 1993 as detailed data for earlier years were not available.

As regard the nominal interest rates, large differences exist among deposit rates and among lending rates across countries making inter-country comparisons difficult. These have to be viewed against the inflation rates in the respective countries. For instance, what matters to the lender, whether he is a depositor or a bank, is the real return he gets from his investment of borrowed money. There may be differences in the way inflation affects a bank or an investor depending on the mix of his inputs or outputs. But, in general, it is the most important factor

that goes into the determination of real returns for depositors, banks and borrowers. Therefore, in this study, we will be concerned with real interest rates and where it becomes necessary and appropriate, nominal values will be used. For instance, in the case of operating ratios, nominal values have been used.

4. Organisation of the Study

This study is divided into five chapters. The first chapter will be the introduction to the study. The second chapter will provide an overview of the commercial banking system and discuss the real interest rates and spread in the member SEACEN countries. The third chapter will examine the factors affecting the lending rates and spreads. Interest rate spreads and profitability of commercial banks will be discussed in Chapter 4. Chapter 5 will review the implications on the interest rate structure and make some concluding statements.

Chapter 2

AN OVERVIEW OF THE COMMERCIAL BANKING SYSTEM, INTEREST RATES AND SPREADS IN THE SEACEN COUNTRIES

1. Introduction

Our study draws data on the first three commercial banks in each SEACEN country. The criteria used in selecting the first three banks have been described in Chapter 1. In order to put our study of the three banks in proper perspective, it is necessary to examine at least briefly, the size and nature of the first three banks in relation to the entire commercial banking and financial system in the respective countries. It is also necessary to examine the level of interest rates and spreads in recent years with a view to ascertaining the proposition that lending rates are too high relative to deposit rates and banks are keeping a large spread for themselves. Hence this Chapter will present a brief overview of the economies, financial systems, banking systems and the main features of the first three commercial banks, followed by an analysis of interest rates and spreads in the SEACEN countries.

2. Financial Sector and the Economy

The SEACEN economies are diverse in size, nature and characteristics. They vary not only in geographical size but also in economic size. They have distinctly different cultures, populations and resources. Economic growth and development in these countries are highly related to the resource endowments, economic and political stability and the policies followed. These conditions generally dictate the size, nature and the level of development of the financial system in SEACEN countries. Table 2.1 presents some key economic data on the SEACEN economies for the year 1994.

As can be seen from Table 2.1, some countries grow faster than others irrespective of their geographical or demographic size. High growth countries have high savings and investment ratios, low rates of inflation and comfortable budget and external account positions. These are the countries which have been economically better managed. Their

Table 2.1

KEY ECONOMIC INDICATORS: 1994

	Population *(% share of total)*	Real GDP Growth Rate	Gross National Savings Ratio 1/	Gross Domestic Investment Ratio 1/	Total Savings Investment Gap Ratio 1/	Changes in CPI	Current Account Balance *(% of GNP)*	Official Reserves *(in months of imports)*	Govt. Surplus *(% of GNP)*	M2 Growth *(%)*	12-Month Time Deposit Rate	Prime Lending Rate
Indonesia	39	7.34	26.9	28.7	-1.8	8.5	-2.0	5.0	-	19.7	14.2	n.a.
Korea	9	8.37	35.3	36.2	-0.9	6.7	-1.3	2.5	0.6	18.7	8.5-10.0	8.5-12.5
Malaysia	4	8.75	33.9	40.5	-6.6	3.7	-6.6	5.3	2.5	14.7	6.2	6.8
Myanmar 2/	9	6.81	n.a.	n.a.	n.a.	22.9	-0.2	4.2	-2.8	22.8	12.0	11.0
Nepal 3/	4	6.90	13.6	19.6	-6.0	8.9	-4.6	9.6	-2.7	23.5	8.5-9.0	n.a.
Philippines	14	4.28	19.0	24.4	-5.4	9.0	-4.6	3.0	1.0	26.8	9.2	13.4
Singapore	1	10.10	49.8	32.3	17.5	3.1	17.4	6.5	8.7	14.4	4.2	6.5
Sri Lanka	4	5.63	19.2	27.2	-8.0	8.4	-6.6	5.1	-10.0	19.6	10.0-17.0	18.5
Taiwan	4	6.51	26.5	23.8	2.7	4.1	2.5	13.8	-2.5	14.0	7.3	8.0
Thailand	12	8.55	34.6	40.6	-6.0	5.1	-5.9	6.8	2.7	12.9	8.3-10.3	11.8

Footnotes: 1/ Percent of GNP.
2/ Figures are for end of March 1995, except for M2 which are for end of March 1994.
3/ Figures are for end of July 1994, except for Gross National Savings, Gross Domestic Investment and Total Savings Investment Gap which are for July 1993.

Source : ***SEACEN Financial Statistics, Series 5,*** July 1995.

financial systems have been more liberal and competitive in recent years. Both deposit and lending rates of these countries are lower than in others owing to the competitiveness and low levels of inflation created by better economic management helped by political stability.

3. Size of Commercial Banking System

One important and common characteristic among the SEACEN countries is the dominance of the financial sector in the economy and that of the commercial banking sector in the total financial sector. In most SEACEN countries, the assets of the financial system are even larger than the annual output of the economy measured by the GDP at market prices. The financial systems of the SEACEN countries are composed of the Central Bank or monetary authority, commercial banks, specialised banking institutions and non-bank financial institutions. Of these, the commercial banks dominate the financial structure in terms of total assets, deposits mobilised and credit extended. In 1993, they contributed not less than 78 percent of total assets of the financial system in Indonesia, 26 percent in Korea, 39 percent in Malaysia, 68 percent in Myanmar, 49 percent in Nepal, 47 percent in the Philippines, 87 percent in Singapore, 40 percent in Sri Lanka, 58 percent in Taiwan and 61 percent in Thailand, as shown in Table 2.2 below.

The size of the commercial banking system and its expansion in recent years can also be seen from the large number of banks and their branch network. As shown in Table 2.3, the total number of domestic banks had increased in Indonesia, Korea, Myanmar, Sri Lanka and Taiwan between 1980 and 1993. In Malaysia, Philippines and Singapore, the number of domestic banks had remained unchanged between the two years. In Thailand this number had decreased by 1. The number of foreign banks had increased in the case of Korea, Singapore, and Taiwan during this period, while it had remained unchanged in Indonesia, Philippines, Sri Lanka and Thailand. In Malaysia, the number of foreign banks had dropped by 1. In contrast, Myanmar had opened two foreign banks. This was the first time that foreign banks had opened their offices in Myanmar. Singapore had the largest number of foreign banks, i.e., 119 in 1993.

In terms of the branches of domestic banks, the numbers have increased in all countries except Sri Lanka where the number of do-

Table 2.2

SIZE OF THE FINANCIAL SECTOR IN THE ECONOMY

Country	Year	Total Assets of the Financial Sector *(% share in total)*				GDP at Market Prices *(in billion US dollar)*	Share in GDP
		Central Bank (1)	Commercial Banks 1/ (2)	Specialized Banks 2/ (3)	NBFIs (4)	(5)	
Indonesia	1980	45.9 *	52.0	n.a.	2.1 **	72.5	47.5 %
	1993	17.7	78.4	2.3 ***	1.6	142.8	121.1 %
Korea	1980	10.6	39.7	23.1	26.6	62.6	175.7 %
	1993	8.4	26.0	10.8	54.9	330.9	282.6 %
Malaysia	1980	17.5	43.4	3.0 ++	36.1	24.5	139.2 %
	1993	17.6	39.4	1.5 ++	41.5	64.4	343.9 %
Myanmar	1980	21.3	76.6	2.1	-	5.9	123.4 %
	1993	31.6	67.5	0.8	0.1	55.1	97.2 %
Nepal	1980	27.6	30.2	-	42.3	2.3	55.2 %
	1993	39.8	49.2	-	11.0 +	n.a.	n.a.
Philippines	1980	21.5	47.5	14.6	16.4	32.5	124.8 %
	1993	30.0	46.5	9.0	14.5	53.7	118.5 %
Singapore 3/	1980	6.6	90.5	-	2.9	11.7	653.3 %
	1993	5.9	87.0	-	7.1	55.1	1030.7 %
Sri Lanka	1980	37.0	43.1	18.8	1.0	3.7	92.7 %
	1993	21.8	39.9	36.8	1.5	10.2	123.2 %
Taiwan	1980	21.1	57.5	11.6	9.9	41.4	143.8 %
	1993	16.9	58.0	15.9	9.2	67.2	995.0 %
Thailand +++	1980	24.7	51.9	12.1	11.3	32.2	87.8 %
	1993	14.7	61.3	9.4	14.6	123.6	165.1 %

Footnotes:

1/ Commercial bank data for 1993 are preliminary.

2/ Thrift banks, national banks and all other financial institutions are included in this category.

3/ Commercial banks include merchant banks. NBFIs include all other financial institutions other than the Central Bank and commercial banks.

* As at 31 March 1981.

** As at 31 March 1980.

*** As at 31 March 1993.

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Table 2.3

SIZE OF COMMERCIAL BANKING SECTOR

Country	Year	Number of Banks				Total No. of Branches	Total Deposits and Loans of Commercial Banking Sector (Outstanding Balances)				
		Domestic		Foreign							
		No. of Banks	Branches	No. of Banks	Branches		Deposits 2/	Loans 2/	Deposit-GDP Ratio	Loan-GDP Ratio	Loan-Dep. Ratio
Indonesia	1980	113	1126	10	71	1197	6408.0	6079.0	14.1%	13.4%	0.9
	1993	224	5184	10	98	5282	160603.0	234514.0	53.9%	78.7%	1.5
Korea	1980	15	759	32	32	791	8556.1	9322.8	22.5%	24.5%	1.1
	1993	24	2190	52	74	2264	79595.0	74963.7	30.0%	28.2%	0.9
Malaysia	1980	21	398	17	148	546	24.3	21.0	45.6%	39.4%	0.9
	1993	21	1018	16	146	1164	123.2 +	113.4	74.3%	68.4%	0.9
Myanmar	1980	4	448	-	-	448	3.0	12.5	7.7%	32.5%	4.2
	1993	12	541	2 *	-	541	30.8	27.3	9.1%	8.0%	0.9
Nepal	1980		241	-	-	241	3.3	3.2	12.2%	11.6%	1.0
	1993		437	-	-	437	21.9 +	19.4 +	n.a.	n.a.	0.9
Philippines	1980	29	1514	4	5	1519	74.8	92.4	30.7%	37.9%	1.2
	1993	29	2430	4	5	2435	556.8	428.8	38.2%	29.4%	0.8
Singapore	1980	13	-	83	-	96	35.7	46.8	142.5%	186.6%	1.3
	1993	13	-	119	-	132	187.4	299.9	210.5%	337.0%	1.6
Sri Lanka	1980	4	899	17	18	917	17.3	17.0	26.0%	25.6%	1.0
	1993	6	812	17	33	845	159.3	125.2	32.1%	25.2%	0.8
Taiwan	1980	23	677	21	21	698	609.9	826.2	40.9%	55.4%	1.4
	1993	41	1409	37	54	1463	6506.6	6809.5	366.8%	383.9%	1.0
Thailand 1/	1980	16	1442	14	6	1448	236.9	241.4	36.0%	36.7%	1.0
	1993	15	2685	14	-	2685	2431.1	2459.3	77.6%	78.5%	1.0

Footnotes:

1/ Branches of domestic banks exclude head office and branches abroad.
2/ All in billion of local currency.
* Representitive offices.
\+ Mid-July 1991.

mestic bank branches declined by 87. The number of branches of foreign banks has increased in almost all SEACEN countries except Malaysia. In terms of total number of banks, Indonesia ranked first with 234 banks in 1993 followed by Singapore (132), Taiwan (78), Korea (76), Malaysia (37), Philippines (33), Thailand (29) and Sri Lanka (23).

Table 2.3 also shows the size of the commercial banking sector in terms of deposits and loans. The data are given in terms of GDP ratios. The Table shows that deposit-GDP ratio is higher in more advanced economies than in less developed ones. Myanmar, Nepal and Sri Lanka have very low deposit ratios. It can also be seen that high loan ratios are associated with high deposit ratios and vice-versa.

There is, however, an increasing tendency among the SEACEN countries to reduce the loan deposit ratios. A notable exception is Singapore where the ratio had increased from 1.31 in 1980 to 1.60 in 1993. Both Table 2.1 and Table 2.3 highlight a few important points. First, the economically more advanced and stable countries have large financial systems in terms of assets relative to GDP. Second, the commercial banking sector in the economically more privileged countries is larger, and their deposit mobilisation and lending portfolios are higher. Third, in general, all countries have wide network of branches with perhaps no clear relationship with deposit or loan ratios. Finally, geographical and demographic size dictate to a large extent, all the indicators of the size of a banking system.

4. Size of First Three Banks in Commercial Banking Sector

Tables 2.4 to 2.8 present some key data on the first three banks, assumed to be representative of the commercial banking sector in the respective countries. Although the first three banks were not so dominant in some of the countries, they nevertheless shed light on the activities and growth of the commercial banks in their countries over the period under consideration.

4.1 Branch Network

In terms of the number of branches, Indonesia's first three banks accounted for only 12 percent of the total in the commercial banking

Table 2.4

SIZE OF FIRST THREE COMMERCIAL BANKS IN TERMS OF NUMBER OF BRANCHES

	Bank A		Bank B		Bank C		Total	
	1980	1993	1980	1993	1980	1993	1980	1993
Indonesia								
No. of Branches	110.0	140.0	86.0	151.0	282.0	327.0	478.0	618.0
% of Total	9.2%	2.7%	7.2%	2.9%	23.6%	6.2%	40.0%	11.8%
Korea								
No. of Branches	92.0	198.0	84.0	195.0	46.0	172.0	222.0	565.0
% of Total	11.6%	8.7%	10.6%	8.6%	5.8%	7.6%	28.0%	24.9%
Malaysia *								
No. of Branches	-	225.0	-	-	-	118.0	-	343.0
% of Total	-	19.3%	-	-	-	10.1%	-	29.4%
Nepal								
No. of Branches	-	226.0	-	206.0	-	5.0	-	437.0
% of Total	-	51.7%	-	47.1%	-	1.1%	-	99.9%
Philippines								
No. of Branches	147.0	283.0	182.0	231.0	127.0	184.0	456.0	698.0
% of Total	9.7%	11.6%	12.0%	9.5%	8.4%	7.6%	30.1%	28.7%
Sri Lanka								
No. of Branches	591.0	335.0	271.0	320.0	27.0	51.0	889.0	706.0
% of Total	64.4%	39.6%	29.6%	37.9%	2.9%	6.0%	96.9%	83.5%
Taiwan								
No. of Branches	99.0	123.0	81.0	106.0	98.0	118.0	278.0	347.0
% of Total	14.2%	8.4%	11.6%	7.2%	14.1%	8.1%	39.9%	23.7%
Thailand								
No. of Branches	244.0	2396.0	171.0	408.0	220.0	385.0	635.0	3189.0
% of Total	16.9%	89.2%	11.8%	15.2%	15.2%	14.3%		

Footnote: * The total in the final column is for two of the three largest banks.

Sources: ***Member Central Banks.***

Table 2.5

SIZE OF FIRST THREE COMMERCIAL BANKS IN TERMS OF TOTAL ASSETS
(in Billion of Local Currency)

	Bank A		Bank B		Bank C		Total	
	1980	1993	1980	1993	1980	1993	1980	1993
Indonesia								
Total Assets	2122.0	26213.0	2269.0	23358.0	1504.0	25008.0	5895.0	74579.0
% of Total	18.9%	9.3%	20.2%	8.3%	13.4%	8.8%	52.5%	26.4%
Korea								
Total Assets	62685.2	19916.1	2880.8	18235.8	8628.1	22522.2	74194.1	60674.1
% of Total	45.6%	10.2%	2.1%	9.4%	6.3%	11.6%	54.0%	31.2%
Malaysia								
Total Assets	13.0	38.3	12.0	23.2	0.933	13.0	25.933	74.5
% of Total	5.7%	22.1%	5.3%	13.4%	0.4%	7.5%	11.4%	43.0%
Myanmar								
Total Assets	27.822	196.666	7.457	17.986	1.242	3.789	36.521	218.441
% of Total	76.2%	88.3%	20.4%	8.1%	3.4%	1.7%	100%	98.1%
Nepal								
Total Assets	2.811	15.682	1.733	13.061	-	1.647	4.544	30.390
% of Total	61.9%	26.7%	38.1%	22.2%	-	2.8%	100%	51.7%
Philippines								
Total Assets	38.652	119.133	6.056	90.925	5.506	76.957	135.633	287.015
% of Total	26.7%	14.8%	4.2%	11.3%	3.8%	9.6%	34.7%	35.7%
Singapore								
Total Assets	10.814	35.074	2.190	34.336	4.377	13.790	17.381	83.200
% of Total	7.3%	4.4%	1.5%	4.3%	3.0%	1.7%	11.8%	10.4%
Sri Lanka								
Total Assets	21.405	83.103	15.281	66.095	1.642	18.988	38.328	168.186
% of Total	50.3%	34.1%	35.9%	27.1%	3.9%	7.8%	90.0%	69.0%
Taiwan								
Total Assets	160.32	890.56	143.84	1233.24	184.20	1046.30	488.36	3170.1
% of Total	13.0%	8.7%	11.7%	12.0%	15.0%	10.2%	39.7%	30.9%
Thailand								
Total Assets	120.157	782.870	46.772	424.930	40.247	441.602	207.176	1649.402
% of Total	40.1%	24.7%	15.6%	13.4%	13.4%	13.9%	69.1%	52.0%

*Sources: **Member Central Banks.***

Table 2.5

SIZE OF FIRST THREE COMMERCIAL BANKS IN TERMS OF TOTAL LOANS
(in Billion of Local Currency)

	Bank A		Bank B		Bank C		Total	
	1980	1993	1980	1993	1980	1993	1980	1993
Indonesia								
Total Loans	1308.0	19017.0	1273.0	16953.0	986.0	19177.0	3567.0	55147.0
% of Total	21.5%	8.1%	20.9%	7.2%	16.2%	8.2%	58.6%	23.5%
Korea								
Total Loans	1545.8	11250.4	1703.9	9366.7	2826.8	12314.3	6076.5	32931.4
% of Total	16.6%	15.0%	18.3%	12.5%	30.3%	16.4%	65.2%	43.9%
Malaysia								
Total Loans	-	21.8	3.9	12.7	0.445	4.6	4.345	391.0
% of Total	-	19.2%	18.6%	11.2%	2.1%	4.1%		34.5%
Myanmar								
Total Loans	10.365	17.804	1.141	3.655	1.031	3.382	12.537	24.841
% of Total	82.9%	65.2%	9.1%	13.4%	8.2%	12.4%	100%	91%
Nepal								
Total Loans	1.756	10.289	1.425	8.092	-	0.97	3.181	19.351
% of Total	55.2%	53.2%	44.8%	41.8%	-	5.0%	100%	100%
Philippines								
Total Loans	24.172	61.298	3.706	43.256	2.389	26.399	30.267	130.953
% of Total	26.1%	14.3%	4.0%	10.1%	2.6%	6.2%	32.7%	30.6%
Singapore								
Total	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
% of Total								
Sri Lanka								
Total Loans	6.478	34.316	6.353	42.013	0.938	9.906	13.769	86.235
% of Total	38.1%	27.4%	37.4%	33.6%	5.5%	7.9%	81%	68.9%
Taiwan								
Total Loans	75.005	502.16	61.92	497.688	67.353	473.952	204.278	1473.8
% of Total	9.1%	7.4%	7.5%	7.3%	8.2%	7.0%	24.8%	21.7%
Thailand								
Total Loans	96.032	639.178	33.973	335.215	29.029	354.724	159.034	1329.117
% of Total	39.8%	26.0%	14.1%	13.6%	12.0%	14.4%	65.9%	54%

Sources: ***Member Central Banks.***

Table 2.7

SIZE OF FIRST THREE COMMERCIAL BANKS IN TERMS OF TOTAL DEPOSITS
(in Billion of Local Currency)

	Bank A		Bank B		Bank C		Total	
	1980	1993	1980	1993	1980	1993	1980	1993
Indonesia								
Total Deposits	1010.0	11884.0	1131.0	12322.0	798.0	14148.0	2939.0	38354.0
% of Total	15.8%	7.4%	17.6%	7.7%	12.5%	8.8%	45.9%	23.9%
Korea								
Total Deposits	1595.1	11457.4	1694.9	11573.4	2327.8	12163.4	5617.8	35194.2
% of Total	18.6%	14.4%	19.8%	14.5%	27.2%	15.3%	65.6%	44.2%
Malaysia								
Total Deposits	-	24.1	6.7	16.3	0.825	10.2	7.525	50.6
% of Total	-	19.6%	27.6%	13.2%	3.4%	8.3%		41.1%
Myanmar								
Total Deposits	2.655	26.263	0.138	0.924	0.193	0.634	2.986	27.821
% of Total	88.5%	85.3%	4.6%	3.0%	6.4%	2.1%	99.5%	90.4%
Nepal								
Total Deposits	2.09	12.067	1.24	8.502	-	1.338	3.33	21.907
% of Total	62.8%	55.1%	37.2%	38.8%	-	6.1%	100%	100%
Philippines								
Total Deposits	15.951	90.593	2.205	57.767	3.458	57.795	21.614	206.155
% of Total	21.3%	16.3%	2.9%	10.4%	4.6%	10.4%	28.8%	37.1%
Sri Lanka								
Total Deposits	7.03	53.197	6.317	44.702	0.798	14.199	14.145	112.098
% of Total	40.7%	33.4%	36.5%	28.1%	4.6%	8.9%	81.8%	70.4%
Taiwan								
Total Deposits	75.606	581.12	68.2	593.525	74.866	563.704	218.672	1738.349
% of Total	12.4%	8.5%	11.2%	8.7%	12.3%	8.3%	35.9%	25.5%
Thailand								
Total Deposits	82.637	588.538	32.865	366.939	30.985	352.678	146.487	1308.155
% of Total	34.9%	24.2%	13.9%	15.1%	13.1%	14.5%	61.9%	53.8%

Sources: ***Member Central Banks.***

system in 1993 although they occupied a 40-percent share in 1980 (Table 2.4). With the increase in the number of banks and the expansion of the branch network of small banks into the rural areas, the share of the first three banks in terms of the number of branches had declined over the years. In Korea, the share of the first three banks in terms of the number of branches had slightly declined. In Malaysia, two major banks accounted for 29 percent of the country's bank branches in 1993. In Nepal, almost all the bank branches were shared between the first three banks in 1993, indicating their oligopolistic dominance in the banking sector. The share of the first three banks in the Philippines using the same measure had declined slightly from 30 percent in 1980 to about 29 percent in 1993. In Sri Lanka, the first three banks dominated the banking sector in terms of number of branches, although their share had fallen from about 97 percent in 1980 to about 84 percent in 1993. In Taiwan, the first two banks accounted for about 26 percent of all the bank branches in 1980 but their share was brought down to 16 percent in 1993. In contrast to all other SEACEN countries, which had seen a diminishing share of their top three banks, the top three banks in Thailand had maintained their share over the period, as shown in Table 2.4.

4.2 Assets

In terms of total assets, the first three banks had varying but generally declining shares in the commercial banking system over the period under consideration. For instance, the first three banks in Indonesia accounted for about 53 percent of total assets in 1980 but this figure was reduced to 26 percent in 1993. In Korea, their share was reduced from 54 percent in 1980 to 31 percent in 1993. Malaysia's first three banks accounted for 43 percent of total assets in 1993 while Myanmar's first three banks dominated the commercial banking sector with a 100-percent control of total assets in 1980 and 98 percent share in 1993. In Nepal, the first three banks accounted for all of the assets of the banking system in 1980 but their share was cut to 52 percent in 1993. Philippines remained at more or less the same position with 35 percent and 36 percent respectively. Singapore's first three banks accounted for a mere 12-percent share of total assets in 1980 and this was reduced to 10 percent in 1993. The dominance of the first three banks in Sri Lanka fell over the period, as reflected by a drop in their share of total assets from 90 percent in 1980 to 69 percent in 1993. In Taiwan, the first three banks held 40 percent of total assets in 1980 but

Table 2.8

SIZE OF FIRST THREE COMMERCIAL BANKS IN TERMS OF TOTAL STAFF

	Bank A		Bank B		Bank C		Total	
	1980	**1993**	**1980**	**1993**	**1980**	**1993**	**1980**	**1993**
Indonesia	5888	8585	4799	9038	26413	41276	37100	58899
Korea	6593	8817	6716	9069	5802	8158	19111	26044
Malaysia	-	9860	-	6916	-	3608	-	20384
Nepal	5054	8444	3055	6753	-	269	8109	15466
Thailand	15870	24689	7844	16329	7001	16330	30715	57348

Sources: ***Member Central Banks***.

only 31 percent in 1993. Thailand had 69 percent of total assets concentrated in the first three banks in 1980. This figure was reduced to 52 percent in 1993.

4.3 Loan Portfolio

The size of the first three banks in terms of their loan portfolio is also shown in Table 2.6. According to the Table, more than half of the countries had more than 50 percent of their total loan portfolio accounted for by the first three banks in 1980. However, in 1993, the first three banks share of total loan portfolio in more than half of the countries was lower and for half of the countries, it was lower than 50 percent. In Indonesia, for example, the first three banks accounted for 59 percent of loans in 1980, but their share declined to 24 percent in 1993. In Korea, the share of the first three banks was 65 percent in 1980 and 44 percent in 1993. In Malaysia, 35 percent of total loans were granted by the first three banks in 1993. In Myanmar, the first three banks provided 91 percent of total loans in 1993, compared to 100 percent in 1980. In Nepal, the first three banks accounted for the entire loan portfolio in both years. In Sri Lanka, the top three banks share was 81 percent in 1980 but fell to 69 percent in 1993. Taiwan's top three banks accounted for about 25 percent of the loans in 1980

and 22 percent in 1993. In Thailand, 66 percent of the loans in 1980 were granted by the first three banks. In 1993, this share declined to 54 percent.

4.4 Deposit Portfolio

In terms of deposits, as Table 2.7 shows, the first three banks in Indonesia accounted for 46 percent of the total deposits in the banking system in 1980 but only 24 percent in 1993. In Korea, the share of the first three banks was 66 percent in 1980 but decreased to 44 percent in 1993. Malaysia's three major banks mobilised 41 percent of total deposits in 1993, while Myanmar's first three banks accounted for over 90 percent of the deposits in both years. In Nepal, the share was 100 percent in both years. Philippines' first three banks had a share of 29 percent in 1980 and their share had increased to 37 percent in 1993. In Sri Lanka, the first three banks mobilised 82 percent of total deposits in 1980 but were able to maintain only 70 percent share in 1993. Taiwan's first three banks accounted for 36 percent of total deposits and only 26 percent in 1993, while Thailand's three major banks mobilised 62 percent of total deposits in 1980 and 54 percent in 1993.

4.5 Total Staff

Table 2.8 presents data on the number of staff in each of the top three commercial banks in each country. While the data on the total number of staff in the entire commercial banking sector are not available, an inter-country comparison of the size of the workforce of the first three banks can be made by looking at this Table. All the five countries listed on Table 2.8 had seen a significant increase in the total staff employed by their top three banks from the year 1980 to the year 1993. This trend reflects the rapid expansion of the commercial banking sector in these countries.

4.6 Market Structure

Another important aspect to examine is the market structure which has a significant influence on the determination of interest rates. In some SEACEN countries, major banks are state-owned while in others, they are privately owned. For instance, in Myanmar, the first three banks are state-owned whereas in Singapore, the first three banks are privately owned. In Sri Lanka, the first two banks are state-owned and

the third one is privately owned. Two of the first three banks (Bank A and Bank B) in Thailand are privately owned. n Korea, two of the first three banks are private. The Central Bank has a controlling interest in the third.

Apart from the ownership point of view, the commercial banking systems in the SEACEN countries are heterogeneous in their structure, market characteristics, extent of state intervention, type of assets and liabilities. For instance, Singapore has a well-developed and sophisticated financial market followed by Malaysia and Thailand. Some other countries such as Sri Lanka, Nepal and Myanmar, do not have such well-developed and integrated financial systems. Further, the level and frequency of intervention in decision making, directed lending, government borrowing, etc., are varied and constrict the operational flexibility of the banks.

The level of competition is equally important for the banking system to be efficient. In a competitive environment, the banks have to offer attractive rates to depositors and borrowers thereby reducing the spreads. However, it is impossible to see a purely competitive market environment in most SEACEN countries, if at all, they may be oligopolistic in nature. In Sri Lanka, the commercial banking system is mainly oligopolistic where the two state banks hold more than two-thirds of total assets of the banking system. Accordingly, the market leaders set the rates and smaller banks would become followers of those rates. Given the fact that these two banks command a lion's share of the market, the other commercial banks are in the fortuitous position of being able to "piggy-back" and pitch their interest rates at the same rates as the state banks. This seems an unfortunate situation of borrowers being penalised and private banks making undue large profits owing to an oligopolistic and mostly state-owned banking structure.

5. Real Interest Rates and Spreads

There is a common view that commercial banks charge high rates from their borrowers and pay low rates to their depositors thus keeping a large margin for themselves. The analysis of the lending rate in each commercial bank to examine this view is the subject of Chapter 3. In this section, we present an overview of the deposit and lending rates as well as the spreads in each country in order to ascertain whether

in general the lending rates and spreads are too high. We will also discuss the interest rate reforms undertaken by each country. Since nominal rates cannot be compared across countries due to the existence of different levels of inflation, we are using real interest rates.[2] Financial liberalisation should effectively lead to real positive interest rates (for deposits) in order to encourage financial savings. While too high real rates will discourage investment and growth, very low real rates will not make a significant impact on savings. There is no consensus as to how high the real interest rate would need to be in order that both savings and investment objectives will be met. It should depend on many factors such as the current level of savings and investment, the level of development of the economy, the priorities and objectives of government policy, macroeconomic stability and the present level of the interest rates. Some authors have defined real interest rates as being high if they are positive by three (3) or more percentage points.[3] How high is too high, however, is not yet clear. One way to address this issue is to compare the deposit rates with lending rates and examine the real interest rate spreads. Financial reforms leading to greater competition should reduce spreads as financial institutions compete for funds and increase efficiency. Smaller spreads mean greater competition and financial deepening. Very high spreads may indicate that financial institutions are making excessive profits. Table 2.9 and Charts 2.1 to 2.10 illustrate the historical trends in real interest rates and spreads during the period 1980 to 1993.

According to the Table and Charts, there is a great degree of variation in the level and increment of real interest rates across the SEACEN countries. For instance, in early 1980s, *Indonesia's* real spread became negative due to high levels of inflation - 12 percent in 1983 and 11 percent in 1984. However, following the reduction of inflation

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2. Real Interest Rate is derived as follows:
   $R = (1+I) / (1+II) - 1$
   where, R = Real Interest Rate
   I = Nominal Interest Rate
   II = Inflation Rate

   See Weerasekera, Y.M.W.B., ***Domestic Resource Mobilization in the SEACEN Countries,*** The SEACEN Centre, 1993.

3. Galbis, Vicente, *High Real Interest Rates under Financial Liberalization. Is There a Problem?,* ***IMF Working Paper WP/93/7,*** International Monetary Fund, January 1993, as quoted in Y.M.W.B. Weerasekera's *Domestic Resource Mobilization in the SEACEN Countries* Kuala Lumpur, 1993, p. 117.

coupled with financial sector reforms including interest rate reforms introduced in 1983, the real interest rates increased and the spread turned to positive during the ensuing years. Among the measures undertaken were the deregulation of interest rates to reflect market conditions, removal of credit ceilings and direct monetary control, introduction of indirect monetary control methods including reserve requirements. New money market instruments such as the certificates of Bank Indonesia (SBI) and Money Market Securities (SBPU) were introduced. Following these reforms, the interest rates were left to be determined by market forces although some element of intervention still existed as the liquidity credit scheme continued to prevail. In January 1990, however, the Government decided to phase out the liquidity credit scheme with a reduction in the amounts eligible for subsidised rediscount and the adoption of market-related interest rates to the end borrower. In *Korea*, both deposit interest rates and loan interest rates remained about the same level throughout the period due to the central bank intervention in the interest rates and the existence of policy loans by the Government which required a certain minimum amount of credit to be directed to the industrial sector at concessional interest rates. As such, the real spread in Korea remained close to zero during most of the period under consideration.

Financial sector deregulation that started during the 1980s had a major role in the behaviour of interest rates in Korea. Initially, commercial banks were privatised nationwide. The number of bank branches increased and branches of foreign banks also increased. Measures were taken to curb inflation in order to encourage financing savings. In 1988, interest rate regulations were relaxed. In 1989, the call market was unified. Three additional commercial banks were established in the same year. These measures helped increase competition in the financial market. The Seventh Five-Year Plan which commenced in 1992 envisaged further moves to deregulate interest rates. Under the new measures, these interest rates are scheduled to be completely deregulated by the end of the 1990s. The current structure of interest rates in Korea has the following characteristics. First, the banks' prime lending rate is lower than yields on low risk bonds such as guaranteed corporate bonds or government bonds. Second, the level of regulated interest rates on bank deposits is lower than that on those with non-bank financial institutions.[4]

4. ***Financial System in Korea*** May 1993 Research Department The Bank of Korea, p. 21.

Table 2.9

REAL DEPOSIT RATES, REAL LENDING RATES AND REAL SPREADS IN THE SEACEN COUNTRIES FROM 1981 TO 1993

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Indonesia														
Deposit	-0.7	-0.1	5.6	7.8	12.9	9.2	7.6	9.7	11.4	7.8	16.3	10.7	5.5	4.1
Lending	1.7	2.3	0.2	1.4	13.9	11.2	8.7	10.7	12.2	8.3	14.7	10.5	5.8	5.3
Spread	2.4	2.4	-5.4	-6.4	1.1	2.0	1.1	1.0	0.8	0.5	-1.6	-0.2	0.4	1.2
Korea														
Deposit	-4.4	0.9	4.5	7.5	7.4	7.1	6.8	2.7	4.0	1.3	0.6	3.6	3.5	1.7
Lending	-4.2	2.7	6.4	7.5	7.4	7.1	6.8	3.6	4.0	1.3	0.6	3.6	3.5	1.7
Spread	0.2	1.9	1.9	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Malaysia														
Deposit	1.2	4.5	5.1	6.9	7.1	6.4	3.4	1.7	2.6	4.1	3.5	2.9	3.1	1.8
Lending	2.1	6.2	7.6	8.9	11.7	11.4	8.9	6.3	5.7	5.7	5.2	5.3	6.2	4.8
Spread	0.9	1.7	2.5	2.0	4.6	5.0	5.4	4.6	3.1	1.7	1.6	2.3	3.1	3.1
Myanmar														
Deposit	n.a.	n.a.	-3.4	-2.7	-4.5	-6.6	-17.7	-12.7	-13.9	-6.9	-18.5	-10.0	-18.5	-10.2
Lending	n.a.	n.a.	-1.5	-0.8	-2.6	-4.8	-16.1	-11.0	-12.7	-5.6	-17.4	-8.7	-17.4	-9.0
Spread	n.a.	n.a.	1.9	1.9	1.9	1.8	1.6	1.7	1.2	1.3	1.1	1.2	1.1	1.2
Nepal														
Deposit	-3.4	-3.5	-1.3	3.9	-0.8	-4.6	-2.5	-0.2	0.1	-0.7	-6.0	-4.3	0.2	-0.9
Lending	-1.6	-1.3	0.9	5.6	0.8	0.5	2.6	6.8	7.4	6.6	1.1	3.2	7.7	5.8
Spread	1.8	2.2	2.3	1.7	1.6	5.0	5.1	7.1	7.3	7.3	7.1	7.4	7.5	6.7
Philippines														
Deposit	3.1	5.1	1.3	-15.6	-1.3	15.3	6.5	4.1	4.3	5.3	-0.1	4.7	2.4	1.3
Lending	3.4	7.3	4.8	-13.8	3.9	17.9	10.0	6.5	6.5	8.9	4.0	9.7	6.6	5.5
Spread	0.3	2.2	3.5	1.8	5.2	2.6	3.4	2.4	2.2	3.6	4.1	5.0	4.2	4.2
ROC, Taipei														
Deposit	-2.2	7.5	7.0	8.0	6.4	5.5	5.7	4.9	4.9	5.2	4.5	3.1	4.6	3.0
Lending	-1.8	7.5	7.0	8.0	7.7	6.0	6.2	5.6	5.7	5.6	4.8	3.7	5.1	3.6
Spread	0.3	0.0	0.0	0.0	1.3	0.5	0.5	0.7	0.8	0.5	0.3	0.5	0.5	0.7
Singapore														
Deposit	0.7	3.1	5.5	4.1	4.4	4.7	3.1	2.4	2.2	2.0	0.7	0.7	0.6	0.5
Lending	3.3	5.2	7.7	6.6	6.7	7.6	5.6	4.4	3.9	4.1	3.5	3.2	3.1	2.7
Spread	2.7	2.2	2.2	2.5	2.3	2.8	2.5	2.1	1.7	2.2	2.8	2.5	2.5	2.2
Sri Lanka														
Deposit	2.6	6.5	5.7	1.2	13.3	3.0	3.3	-1.5	3.7	-4.5	2.5	3.7	3.8	4.7
Lending	3.0	8.7	4.9	5.0	19.3	12.1	12.7	6.5	9.7	0.7	7.9	7.7	9.2	11.9
Spread	0.4	2.2	-0.8	3.8	6.0	9.1	9.4	8.0	6.0	5.2	5.4	4.0	5.4	7.2
Thailand														
Deposit	0.4	6.9	8.5	11.4	8.4	5.4	4.4	4.6	4.4	7.3	4.5	4.3	4.6	3.1
Lending	5.7	13.0	13.3	17.9	16.2	13.0	12.2	10.8	9.3	12.2	12.6	12.4	11.6	8.9
Spread	5.3	6.2	4.8	6.4	7.8	7.6	7.8	6.1	4.8	5.0	8.0	8.2	7.0	5.7

Sources: ***SEACEN Financial Statistics, July 1992.***
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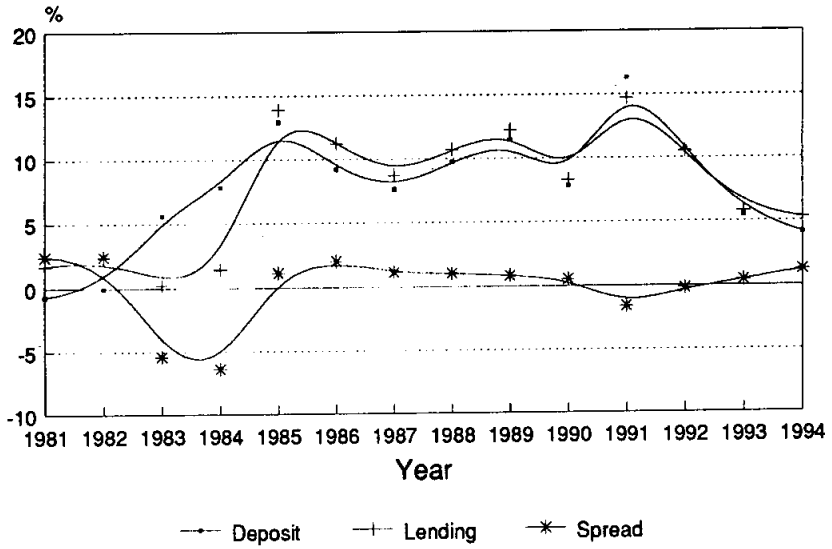
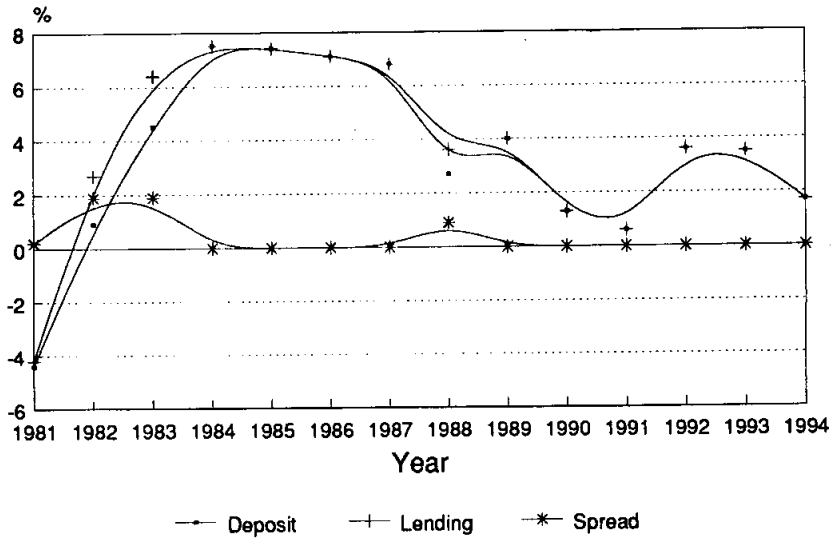
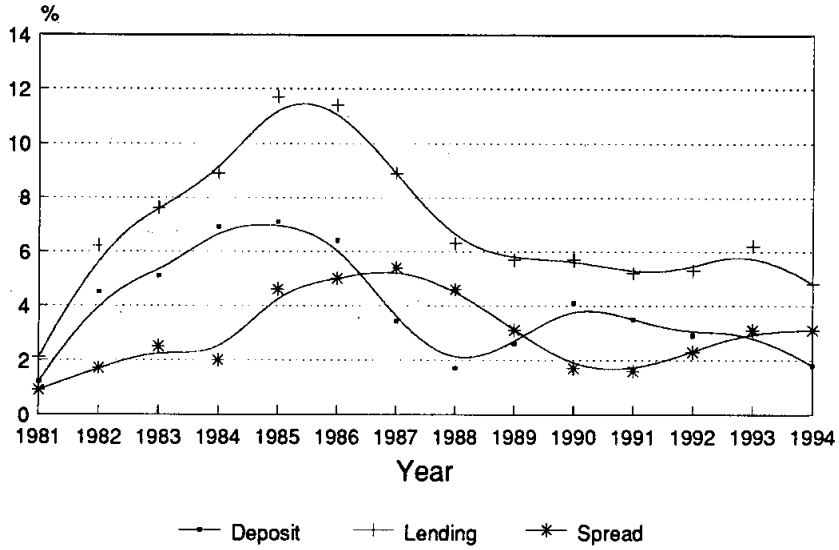
Indonesia
Chart 2.1



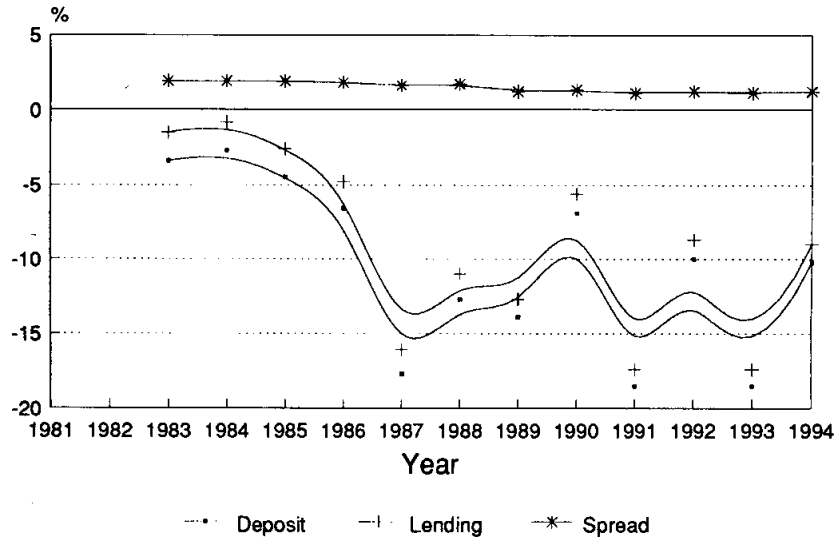
Korea
Chart 2.2



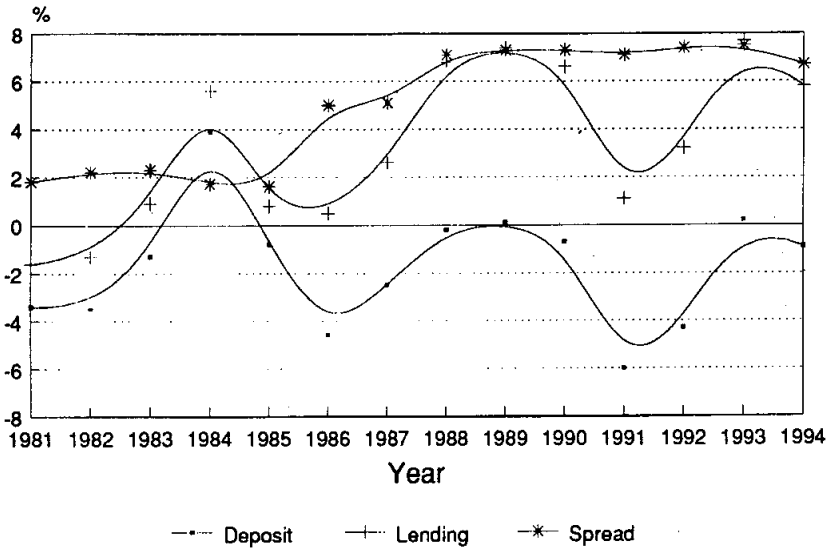
Malaysia
Chart 2.3



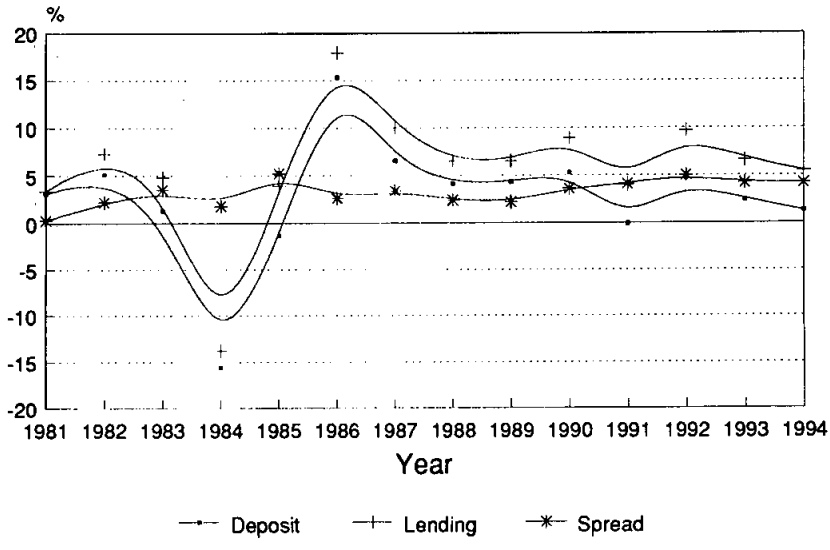
Myanmar
Chart 2.4



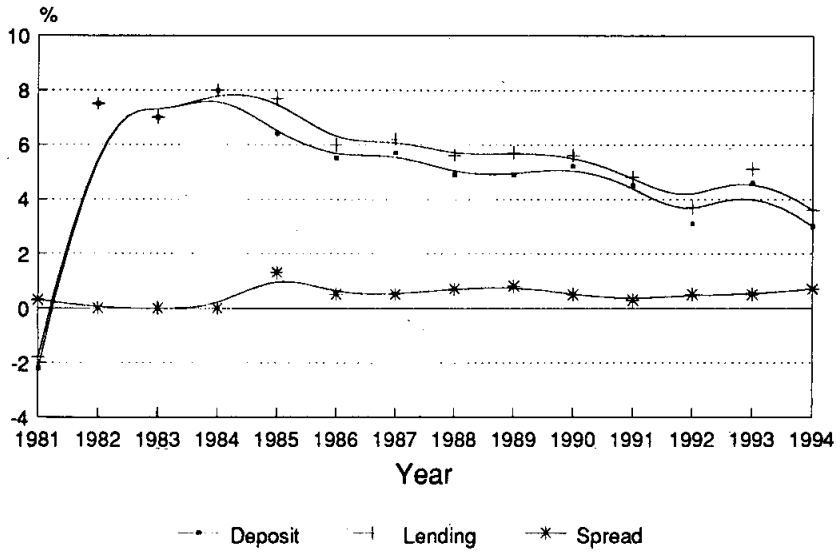
Nepal
Chart 2.5



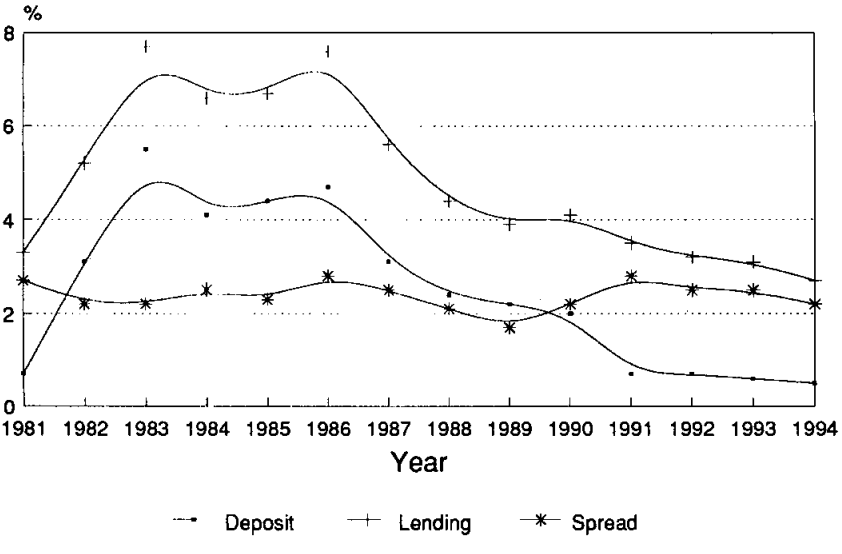
Philippines
Chart 2.6



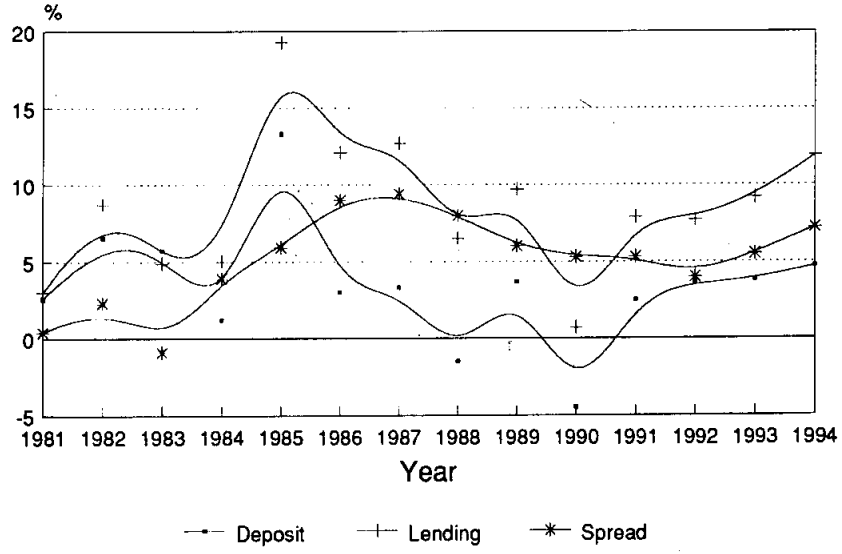
Republic of China, Taipei
Chart 2.7



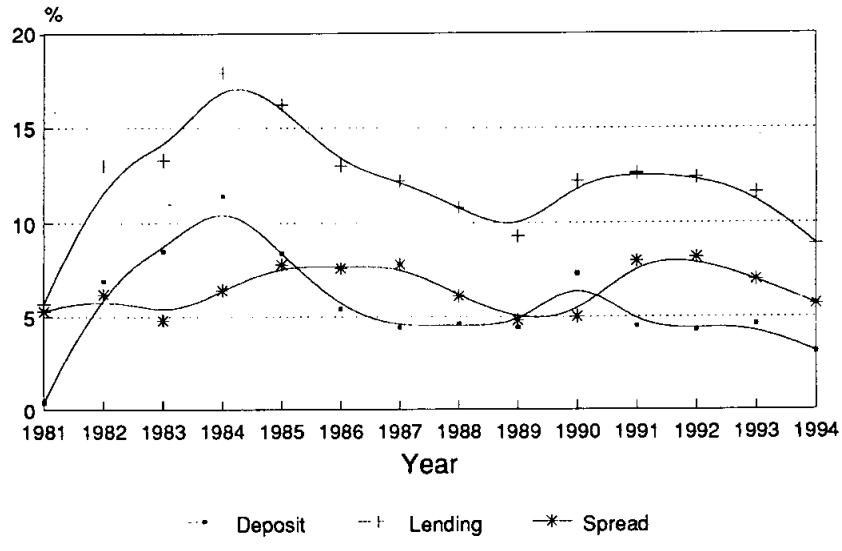
Singapore
Chart 2.8



Sri Lanka
Chart 2.9



Thailand
Chart 2.10



Owing to a low and stable inflation rate, *Malaysia's* real interest rates and spread remained positive during the whole period. In the mid-1980s, Malaysia's real lending rates increased at a faster rate than the real deposit rates, thus increasing the real spread during the period. The real spread peaked at 5.4 percent in 1987. The financial sector deregulation that started in 1973, with the introduction of a bidding system for government securities, had a major impact on the behaviour of interest rates in Malaysia. In August 1973, the interest rates in finance companies were deregulated. In October 1978, interest rates on deposits and non-priority loans of commercial banks were formally freed, but remained significantly influenced by the behaviour of a few banks. An interbank rate mechanism was introduced in late 1981, under which each individual bank announced its own base lending rate (BLR) in line with its costs of funds (COF). The rate was, however, under constant supervision by the Central Bank. From November 1983, all lending rates of commercial banks were pegged to the BLR which applied to the banks' prime customers. In February 1991, interest rates were completely liberalised. Following this, the BLR was also freed from the administrative control of the Central Bank.

In *Myanmar*, interest rates were very low and fixed during the whole period with very high inflation rates, i.e., over 15 percent throughout the 1987-1993 period. The real interest rates had been negative during the whole period. Since both deposit and lending rates were negative and lending rates were slightly higher, the commercial banks were still able to make a positive real spread. However, negative real rates on deposits would have had a major adverse impact on deposit mobilisation efforts of the country. Financial reforms undertaken in Myanmar since 1988 had included interest rate reforms as well. In 1989, interest rates on Treasury bills and bonds were revised to reflect market rates. Myanmar Economic Bank introduced call deposits. The interest rates on fixed deposits were raised in October 1989 while those on savings deposits and savings certificates were raised in July 1992. Yet the interest rates are still under the control of the Central Bank. Despite the measures undertaken to free the interest rates, high inflation rate had made real deposit and lending rates negative. In *Nepal*, the real deposit rates were negative almost during the entire period. This was due to high inflation rates and administered interest rate policy of the Central Bank. From time to time, however, Nepal tried to rationalise its interest rate structure by adjusting deposit and lending rates. In 1980, interest rates were partially liberalised with minimum rates on

deposits and maximum rates on priority lending programmes. In May 1986, the authorities allowed banks to freely set deposit rates at or above minimum rates and freed lending rates (except for a maximum lending rate of 15 percent for loans to priority sectors). In 1989, a complete liberalisation of interest rates was undertaken. There were also revisions in the refinance rates, reserve requirements and issue of debentures by Nepal Rastra Bank. The financial sector was opened up for more competition. More private banks and finance companies were established and new bank branches were to be based on commercial considerations. The success of the reforms will largely depend on the proper management of macroeconomic elements such as budget deficit and inflation. The high rate of inflation was the main cause of negative real deposit rates in Nepal.

In *the Philippines*, interest rates were relatively higher compared with other countries. Despite a highly fluctuating inflation rate from year to year, the Philippines had always enjoyed positive real spread during the period under review. The Philippines also undertook a series of financial reforms in the 1980s. Interest rate deregulation was a key element in the reform package of 1980. The interest ceilings on savings deposits, Negotiable Order of Withdrawals (NOWs) accounts, deposit substitutes and loans (except those with maturities of less than 2 years) were removed in July 1981 while interest rate ceilings on short-term loans were removed in 1983 thus achieving almost complete liberalisation of interest rates. The reform package suffered a set-back during 1983-1985 period due to a deterioration in the economic and political situation but was recommenced in 1987. As a result of these measures, the nominal interest rates increased and remained at a higher level ever since.

On the other hand, *Singapore*, with the most liberalised financial system and low inflation rates, had recorded real positive interest rates and spreads during the period. The real spreads in Singapore had always remained at a stable figure of less than 3 percent during the whole period. In contrast, *Sri Lanka* has the highest interest rates among all the SEACEN countries. With moderate to high inflation, Sri Lanka also enjoyed the largest real spread, reaching 9.4 percent in 1987. The high interest rates in Sri Lanka were partly due to the interest rate deregulation measures undertaken since 1978. For instance, the Treasury bill rate was allowed to be determined primarily on the basis of market forces. In the secondary market, the differences between

discount and rediscount rates were narrowed. Refinance rates in respect of a number of credit facilities were adjusted in a bid to move towards market interest rates. With these and other liberalisation measures undertaken particularly since 1988, and inflation somewhat under control, Sri Lanka's real spread has remained high although at times, the real deposit rates turned negative.

In *Taiwan*, interest rates were generally low, but slightly higher than in Singapore. Inflation rates were also relatively low in Taiwan but the real spread was small due to the thin margin between the lending and deposit rates in Taiwan. The financial sector liberalisation in Taiwan had an impact on the level of real interest rates. Until 1989, Taiwan's interest rates were strictly controlled by the Central Bank. Upper limits had been set for deposits of different types and terms and upper and lower limits had been fixed for loans of different terms. The actual interest rates were usually close to the upper limits owing to the chronic shortage of funds. However, following the G-5 Meeting in 1985, there was a surge in the inflow of foreign funds which created an oversupply of capital. This led to a decline in interest rates even below the minimum level set by the Central Bank. And for a Period, banks rejected large time deposits. As a result of these developments, a system of posting standard loan interest rates was implemented in 1985. Since 1989, interest rates began to be liberalised and remained at very low levels. Although positive, the margins between deposit and lending were very small in Taiwan.

In *Thailand*, with low inflation rates and large differences between deposit and lending rates, the real spread remained very high during the period under consideration. On average, the real spread was over 6 percent. Thailand's high real lending and deposit rates were partly due to interest rate deregulation undertaken during the 1980s and early 1990s. These measures had been incorporated into the Three-Year Plans of 1990-1992 and 1993-1995 in order to generate a large amount of financial savings required for development and to make Thailand a major regional financial centre. Low inflation rates are the other reason for such high real rates.

The relationship between real interest rates, inflation and spreads can be summarised as in Table 2.10. The Table shows some special tendencies. First, low inflation countries tend to have low real interest rates, except in the case of Korea and Thailand. Conversely, high

inflation countries have high real interest rates. Second, low inflation countries have low real spreads, except in the case of Thailand. Third, countries with high real interest rates tend to have high real spreads. The countries with low real spreads in our sample are Indonesia, Korea, Malaysia, Singapore and Taiwan. Although Korea's real interest rates are high, its inflation as well as the real spreads are low. In Indonesia, positive but not too high real interest rates can be achieved by bringing down inflation. Myanmar is a special case where interest rates were abnormally low.

The aggregate data for the countries indicate differences in the levels of real lending rates and real spreads. The real spreads range from negative to zero and low to high. These estimates, based on one average deposit rate and one average lending rate, are only indicative of the interest rates for the particular countries. More insight into the level of lending rate and spread can be obtained by taking into account the different rates applicable to different categories of deposits and various other factors that affect the cost of funds and the lending rate. It is observed that various financial sector reforms particularly interest rate deregulation measures undertaken by the SEACEN countries dictated to a large extent the behaviour of deposits and lending rates with inflation being the other important additional factor.

Table 2.10

LEVEL OF REAL INTEREST RATES, INFLATION AND SPREADS

Country	Real Interest Rates		Inflation		Real Spreads	
	High	Low	High	Low	High	Low
Indonesia	Yes	-	Yes	-	-	Yes
Korea	Yes	-	-	Yes	-	Yes
Malaysia	-	Yes	-	Yes	-	Yes
Myanmar	-	Yes	-	-	-	-
Nepal	Yes	-	Yes	-	Yes	-
Philippines	Yes	-	Yes	-	Yes	-
Singapore	-	Yes	-	Yes	-	Yes
Sri Lanka	Yes	-	Yes	-	Yes	-
Taiwan	-	Yes	-	Yes	-	Yes
Thailand	Yes	-	-	Yes	Yes	-

Source: Weerasekera, Y.M.W.B., ***Domestic Resource Mobilization in the SEACEN Countries***, The SEACEN Centre, Kuala Lumpur, 1993, p. 125.

Figure 2.1

Composition of Financial System in Indonesia

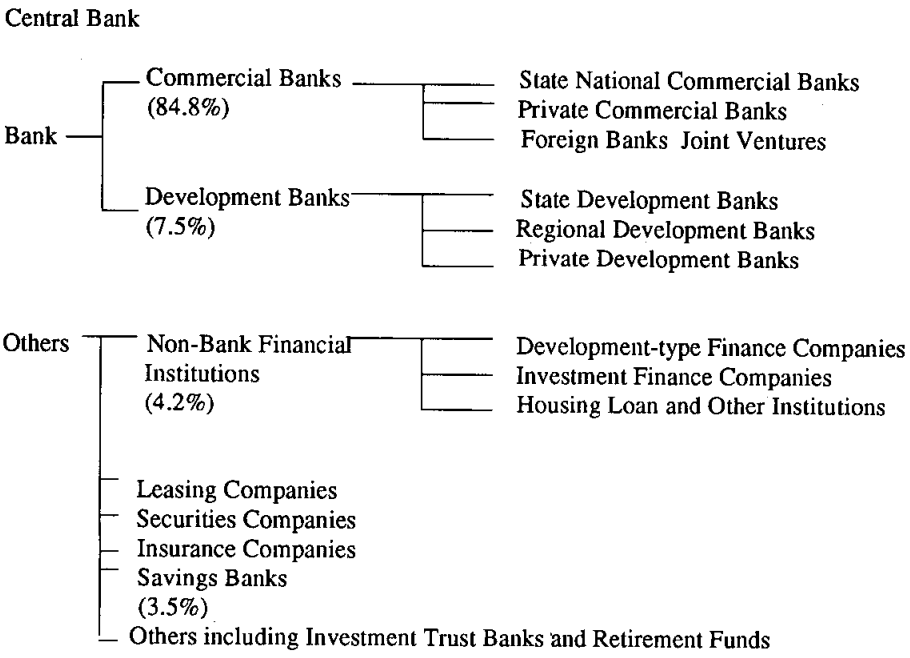
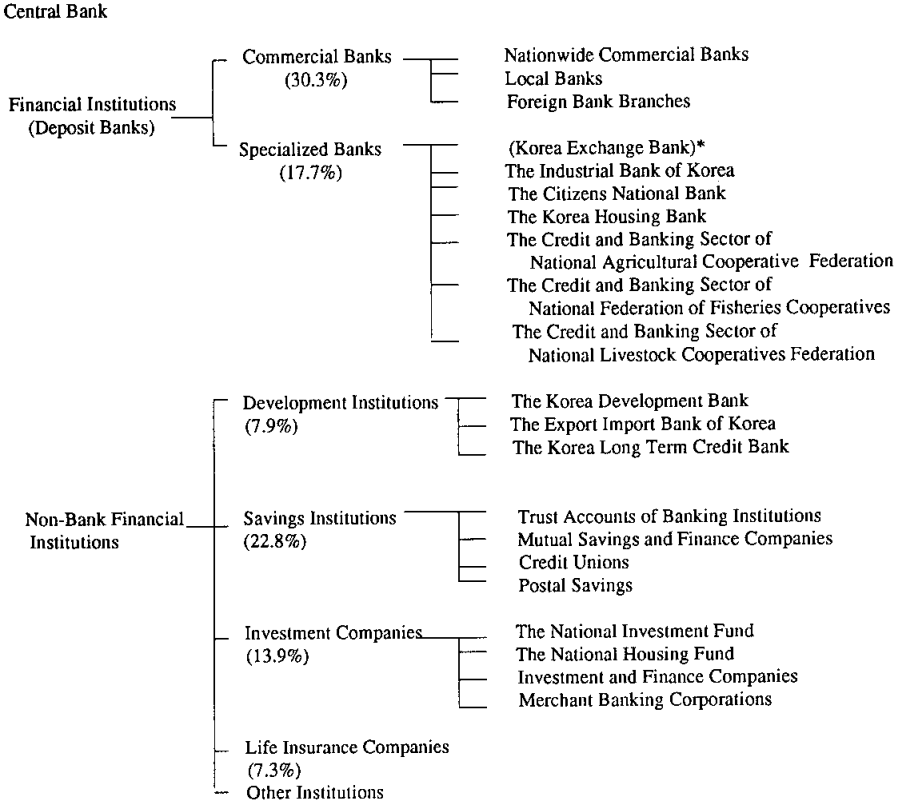


Figure 2.2

Composition of the Financial System in Korea



* changed Commercial Bank in 1990.

Figure 2.3

Composition of Financial System in Malaysia

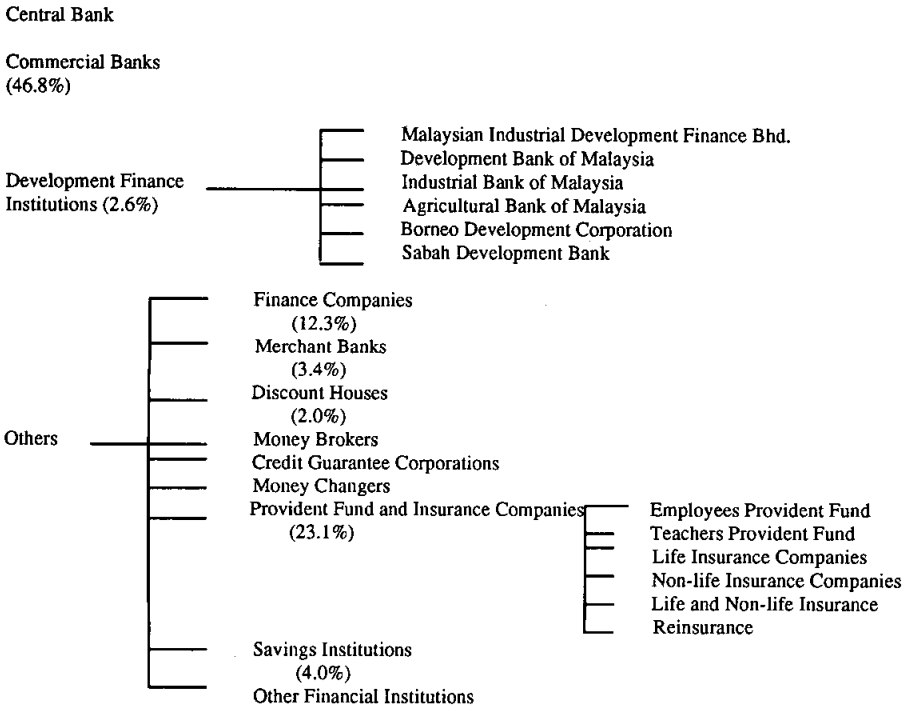
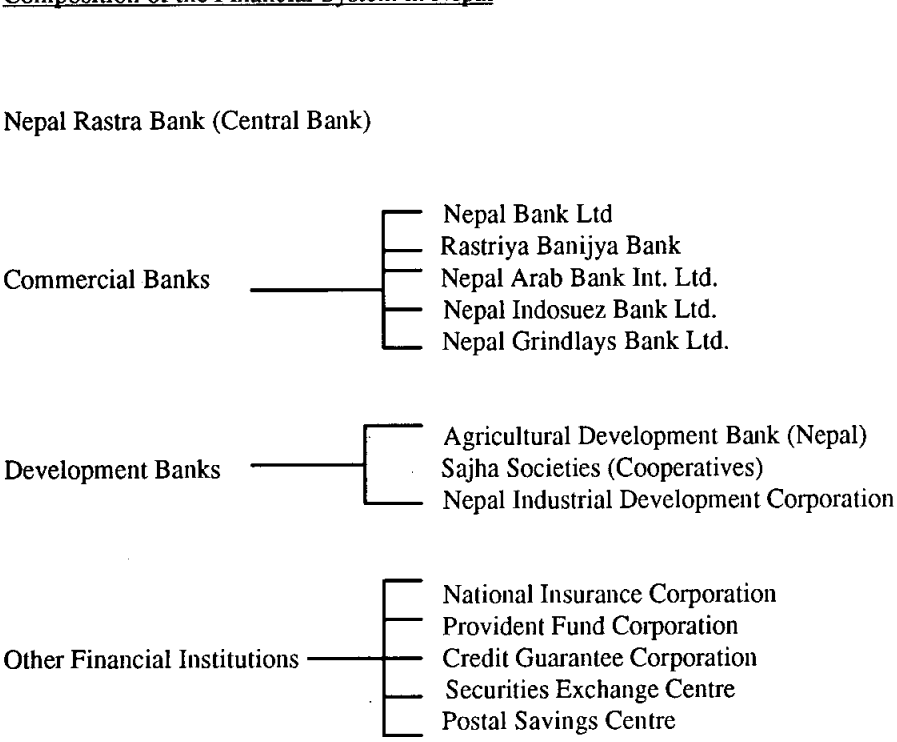


Figure 2.4

Composition of the Financial System in Nepal



Source : ***Monetary Policy in the SEACEN Countries: An Update*** by Azizah Talib, The SEACEN Centre, 1993, p. 324.

Figure 2.5

Composition of the Financial System in Philippines

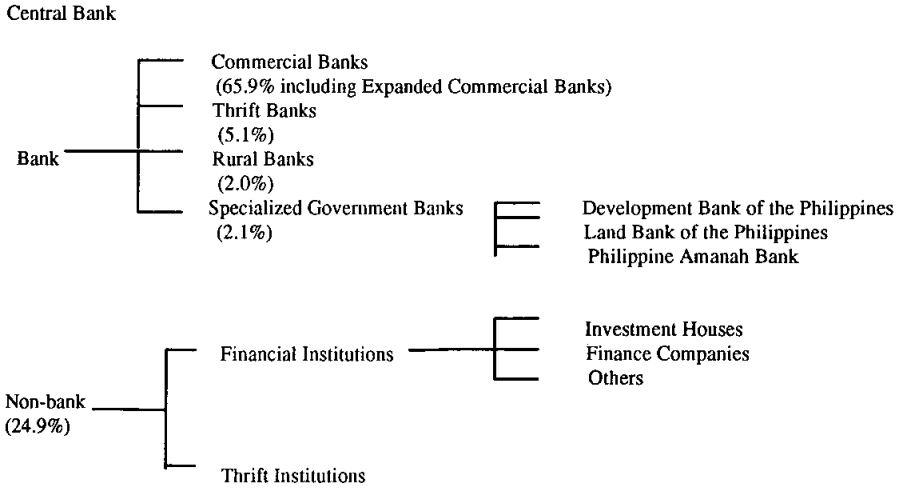
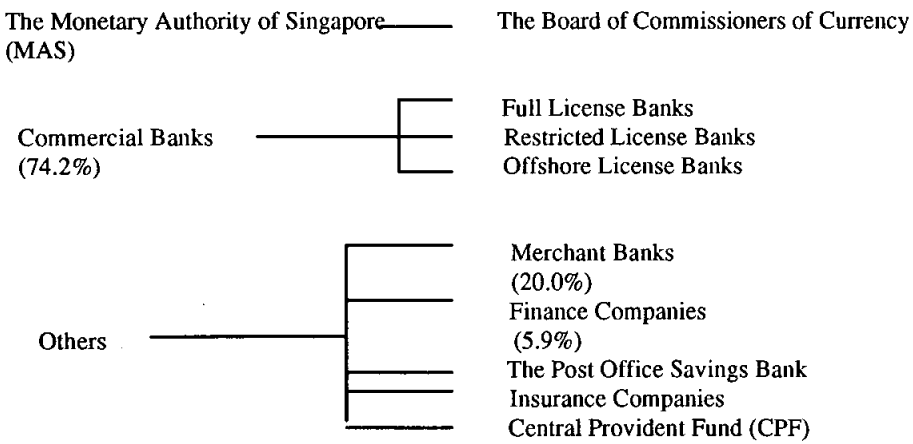


Figure 2.6

Composition of the Financial System in Singapore



* Commercial Banks (Full Banks) include Development Bank of Singapore.

Figure 2.7

Composition of the Financial System in Sri Lanka

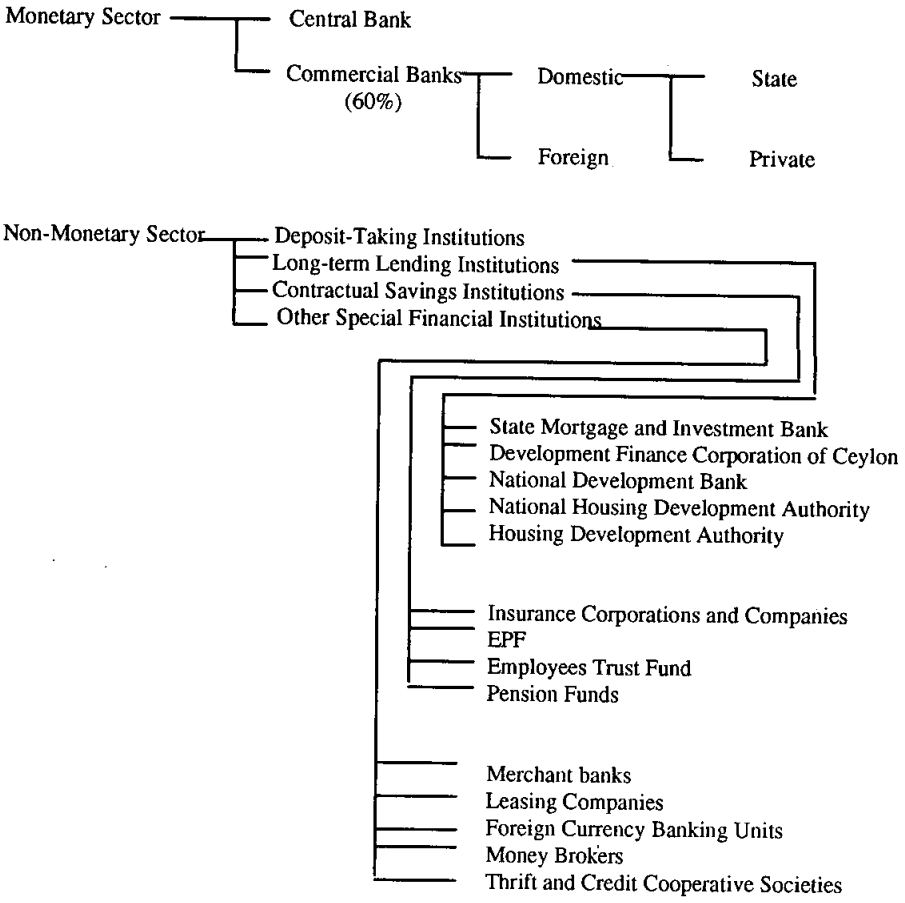


Figure 2.8

Composition of the Financial System in Taiwan

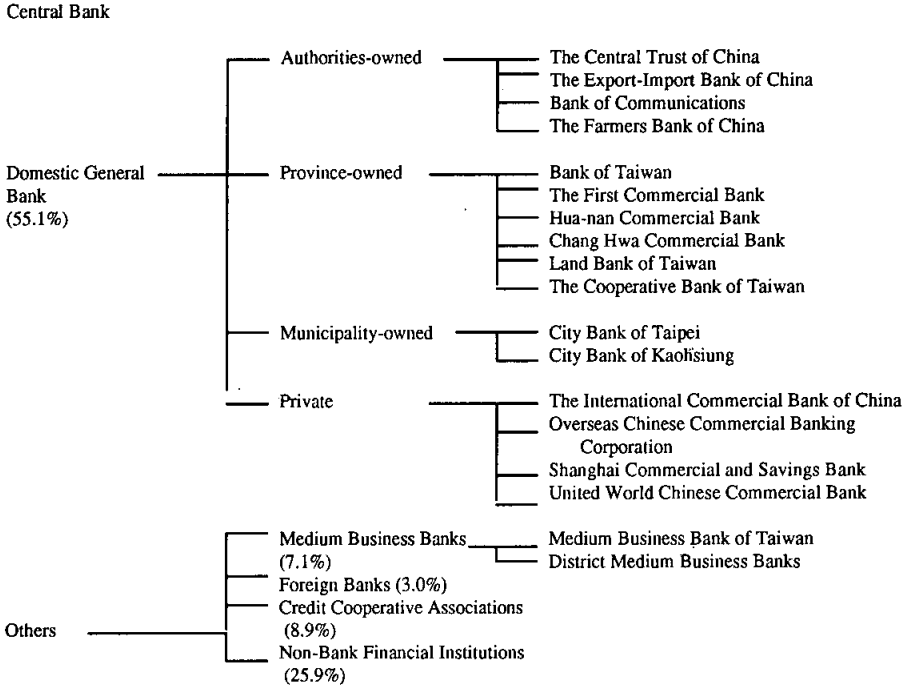
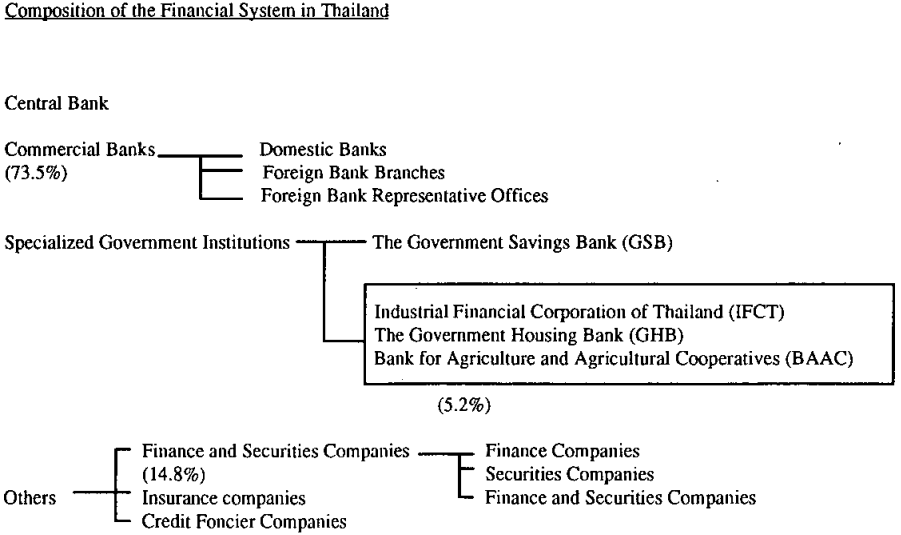


Figure 2.9



Source: Financial and Capital Markets in Asia, FAIR, 1991, pp. 24-26.

Chapter 3

FACTORS AFFECTING LENDING RATES AND SPREADS

1. Introduction

High lending rates are a common phenomenon in many SEACEN countries. They are in part symptoms of fundamental macroeconomic imbalances such as high and variable inflation rates, large government deficits and the inadequate tax treatment of financial instruments. An additional element in the high lending rates is the financial intermediaries' spreads. Typically, spreads are influenced and adjusted in response to the changes in reserve requirements of the central bank, forced investments, taxation, banks' costs and profits. The sizes of these various elements may provide clues to the underlying causes of the high lending rates. By influencing these elements, among other things, it may be possible to bring down high lending rates and improve efficiency in the financial system and enhance investment and savings. This chapter will outline the methodology adopted to identify the various factors causing the divergence between lending and deposit rates.

2. Methodology

To answer the above queries, one has to examine the components of the lending rate, i.e., the cost of funds and the spread. The cost of funds should take into account the costs of (i) deposits, (ii) reserve requirements, and (iii) forced lending while the spread should include (i) administrative expenses, (ii) provision for actual and possible loan losses, (iii) explicit taxes, (iv) return on shareholders' funds (profits), and (v) a margin for the risk factor. We can proceed to incorporate these items in an analytical framework as follows.

2.1 Cost of Funds

The banks normally charge a higher interest rate on its loans to borrowers than what it pays to its depositors. The loan rate would have to be high enough to cover the cost of the deposits, cost of maintaining statutory reserves and liquid assets, low yield on priority

sector and other subsidised lending, cover administrative and overhead costs, provide for actual and possible loan losses and taxes, provide a certain margin for risks and earn a reasonable return on shareholders' funds. This can be presented in a simple analytical framework as follows.

To provide a loan of $A, the size of deposits that must be raised by banks to make the loan as well as to maintain statutory reserves, primary and secondary liquid assets as required by the central bank and to provide priority sector loans, can be computed as follows. Assume that no interest is earned or paid:

$$D = A / (1 - P_1 - P_2 - P_3 - P_4) \quad (1)$$

where,

- D = Size of deposit required (or loanable deposits)
- A = Size of the loan
- P_1 = Proportion of deposit that must be maintained as statutory reserves at the central bank
- P_2 = Proportion of deposit that must be maintained as liquid assets
- P_3 = Proportion of deposits that must be directed to priority sectors
- P_4 = Proportion of deposits that must be loaned to government

If we assume that P_1, P_2, P_3 and P_4 earn yields of y_1, y_2, y_3 and y_4 respectively and the bank will have to pay an average interest rate of r to its depositors, the cost of funds (COF) to the bank would be:

$$COF = \frac{A}{(1 - P_1 - P_2 - P_3 - P_4)} (r - y_1p_1 - y_2p_2 - y_3p_3 - y_4p_4) \quad (2)$$

By manipulation of terms, the above can be written as:

$$COF = \frac{A}{(1 - p_1 - p_2 - p_3 - p_4)} \{ r(1-p_1-p_2-p_3-p_4) + (r-y_1)p_1 + (r-y_2)p_2 + (r-y_3)p_3 + (r-y_4)p_4 \} \quad (3)$$

Equation can be restated as:

$$COF = A\left\{r + \frac{r-y_1}{D_L} p_1 + \frac{r-y_2}{D_L} p_2 + \frac{r-y_3}{D_L} p_3 + \frac{r-y_4}{D_L} p_4\right\} \quad (4)$$

where, DL = $(1-p_1-p_2-p_3-p_4)$ and is defined as loanable deposits and r will be the weighted average of all deposit rates.

2.2 Spread and Lending Rate

The margin or the spread over the cost of funds should be sufficient to cover certain important expenditure items, namely, the administrative and overhead costs, provision for loan losses, explicit taxes, an adequate return for shareholders' funds and the risk factor. The price of a loan to the non-priority sector should therefore be:

$$P_L = COF + a + l + t + d \quad (5)$$

where,

P_L = Price of a non-priority sector loan or the lending rate
a = Administrative expenses
l = Provision for actual and possible loan losses
t = Various taxes and other charges
d = A certain profit margin

The analysis of the implications on interest rate structure will be based on the results obtained in the previous two sub-sections. How and to what extent each of the elements in the computation of cost of funds and the spread will affect the lending rate would then be discussed. In particular, the impact of various types of deposits and deposit rates, statutory reserve requirements, preferential lending, administrative and personnel costs, loan losses and banks' profitability on the lending rate and their repercussions on the whole structure of interest rates will also be examined. The computation of cost of funds has to be limited to one year, i.e., 1993 only, due the non-availability of suitable data for 1980. However, a broad overview of the performance of commercial banks with regard to margins (cost of intermediation) will be provided for both years.

2.3 Computational Differences

The computation of cost of funds varies from bank to bank and country to country. But the basic elements that go into the computation are the same. The method can be generalised to all countries and all banks even though it may differ in some way or another from the method being used in each country or each bank. The differences can be observed by the explanations given by the respective countries (central banks) regarding the cost of funds computation.

In *Indonesia*, for example, there is no central bank regulation on how to compute cost of funds and the base lending rate (BLR). However, for analytical purposes, Bank Indonesia computes the cost of funds and the BLR as follows:

The cost of funds is based on the interest cost of funds that comes from:

(i) Bank Indonesia;
(ii) Other banks; and,
(iii) Third parties.

The BLR formula is:

$$BLR = \frac{IC + OC + D + BD}{LF} \times 100\% + Spread$$

where,

IC = Interest cost of funds
OC = Overhead cost
D = Depreciation
BD = Cost of bad debts
LF = Loanable funds (Funds - Idle funds)
Spread = Expected rate of profit

Funds are defined as that from Bank Indonesia (BI), interbank and third parties while idle funds are defined as cash in vault, demand deposits with BI, demand deposits with other banks and net fixed assets. The commercial banks are free to determine the margin above its BLR. The margin is generally between 2 percent and 5 percent.

In *Korea*, the interest rates on all loans and discounts provided from banking funds have been decided by individual banks since the second stage of interest rate liberalisation in November 1993. Individual banks look upon the cost of banking funds as the weighted average deposit rate and set their prime rate considering the reserve requirement ratio. However, the actual loan rate is decided by allowing the proper margin above this prime rate, taking into account the borrower's credit standing, the term of the loan and the type of business. Some indications of the relationship between prime rate and the market rates can be observed in the following table:

LENDING RATES
(As of End-March 1994)

	Prime Rate	**Rate of Financial Products Linked Market Rates**
Bank A	8.75	8.75 - 11.25
Bank B	8.75	8.75 - 11.25
Bank C	9.00	9.00 - 11.50

In *Malaysia*, the BLR is assumed to be the prime lending rate of banks which depends largely on COF. This is normally the funding cost plus overhead costs and a margin of about 0.25 percent. However, the prime lending rate also depends on the creditworthiness of the client. The lending rates of banks are generally higher than their prime lending rates since they add a margin, taking into account their profit expectations and the risk involved in granting loans. Banks are free to determine this margin and there are no regulations imposed by the Central Bank. The margin, however, varies depending on the type of security, the purpose of the loan and the past repayment record of the client. For instance, a priority sector loan such as low cost housing will have Base + 1.95 percent with a maximum of 9 percent per annum. This is actually a subsidised rate. Bank Negara Malaysia reimburses the difference in the interest rate.

In *Myanmar*, the central bank rate in 1994 was set at 11 percent. Based on the central bank rate, the minimum deposit rate was fixed

not to be less than 3 percent below this rate and the maximum lending rate not to be more than 6 percent above this rate. Thus, commercial banks are free to set their rates anywhere between 8 percent and 17 percent. In effect, the cost of funds and lending rates are influenced by central bank regulations.

In *the Philippines*, the cost of funds is computed as follows:

(i)	Interest Cost	:	Deposits Deposit Substitutes Interbank Borrowings
	Add		
(ii)	Intermediation Cost	:	Legal Reserves Gross Receipts Tax Carry cost on the Magna Carta For small enterprises Agri-agra requirement Overhead expenses
	Divide by		
(iii)	Funds Raised	:	Deposits Deposits Substitutes Interbank Borrowings (Bills payable) Float funds (Taxes, SSS, etc.)

For the purpose of determining the cost of funds, sometimes the incremental cost of funds (ICOF) is applied. Under this method, it is assumed that funds are fully deployed such that any user of funds will be funded by the easiest funds to raise: usually these are time deposits. The components of the ICOF are similar to the above, i.e., interest cost plus intermediation costs.

There is no such thing as a standard spread. It depends on the borrower. The commercial banks set their own BLR, not necessarily based on the cost of funds, but based on the prevailing lending rate which is normally 2 to 4 percentage points above the Treasury Bill (TB) rate of similar tenor. This margin over the TB rate also varies depending on the demand for loans and the credit standing of the borrower.

For use of prime customers, the BLR would be only a few basis points above the TB rate and for less prime customers, it could be up to 400 basis points above TB rate. The margin represents the risk being taken by the bank and the level of loan demand. For instance, in a very high demand situation, even the super prime customers such as the top 1,000 companies, will have to pay about 150 basis points above the TB rate and during very low demand, they will just be paying the prevailing TB rate or even a percentage point lower.

In *Taiwan*, the prime rate is used as a basis for pricing a floating rate loan. The prime rate used by Taiwan banks is not the lowest rate applicable to the best customers of a bank. The interest rate formula recorded in a loan contract may take the form of prime rate plus or minus a certain basis points. Although loans priced at prime rate minus a certain basis points are very common in practice, in general they constitute only a small portion of the total loans extended by a bank. As many large companies are able to procure funds directly from the money market and money market rates are lower than prime rates, banks when pricing a floating rate loan to these companies are forced to use a rate lower than their prime rate. Banks in Taiwan are allowed to set a margin above their prime rates almost without restriction so long as the actual interest rate charged by a bank is less than 20 percent per annum. According to central bank sources, the margin over the prime rate may include, in addition to the cost of funds, management costs, operational costs, other costs, risk premium, liquidity premium and profit target.

Commercial banks in *Singapore* are free to quote their own lending and deposit rates. The Monetary Authority of Singapore (MAS) does not collect data on the cost of funds of commercial banks. The estimated average cost of funds of the ten leading banks, based on their deposit rates, was about 10.8 percent as at end-1980. This would have declined to 2.4 percent as at end-1993. The average prime lending rates for the ten leading banks in Singapore as at end-1990 and end-1993 were 13.6 percent and 5.34 percent respectively. The margin over the prime lending rate chargeable on loans is a bank's commercial decision. Different banks could quote different rates depending on the cost of funds, loan product, its tenure, relationship with the customer, competition, etc.

In *Sri Lanka*, three main items are taken when computing cost of funds. They are: (i) interest paid on deposits; (ii) impact of statutory reserve ratios; and, (iii) administration and overhead costs. The prime lending rate is generally a function of cost of funds. However, even the prime lending rate depends on the creditworthiness of the client. The lending rates of commercial banks are generally higher than the prime lending rates since they add a margin to represent their profit expectations and the risk involved in granting loans. Banks are free to determine this margin and there are no regulations imposed by the Central Bank. The margin, however, varies depending on the type of security, the purpose of the loan and the past repayment record of the client.

In *Thailand*, the reference lending rate is called the Minimum Retail Rate (MRR). The MRR is calculated as follows:

MRR = Cost of Deposits + Cost of Operations + Specific Business Tax (3.3% of loan interest income) + Normal Profit Margin (no more than 2%)

Additional margin above MRR may be freely set by each bank on each loan mainly to account for the credit risk.

3. Determination of Lending Rate

The most important component in the lending rate is the "cost of funds" which in turn is influenced by the composition and the maturity structure of deposits, the interest rates on such deposits, statutory reserve requirements, and priority sector and subsidised lending schemes, among other things. The next important component would be the margins charged over the cost of funds to cover operating expenses, loan losses and expected profits. Based on the foregoing model, this section will decompose the lending rates of the SEACEN countries into the above components and analyse the causes and consequences of the size of each component in the lending rate. It should be noted that all components in the cost of funds are taken as shares of total deposits and all margins over cost of funds as shares of total assets.

Table 3.1 presents in a summarised form the results of our exercise. An important point to note is that the results presented here can be quite sensitive to small changes in the shares of deposits allocated

to various sectors (i.e., p_1 to p_4) and the corresponding yield rates (i.e., Y_1 to Y_4). In some cases, we have assumed certain shares or percentages. A small change in these shares or percentages can make a big difference in results. For this reason, the results must be interpreted with caution.

Several important points can be noted from the results. First, the derived lending rates, excluding the margins for profits, are generally in line with the level and the direction of actual lending rates. For instance, the derived lending rates are higher in Indonesia, the Philippines and Sri Lanka relative to other countries in the sample. The actual lending rates are also higher in these countries. In Nepal, there is a large difference between the actual rates and the derived rates which may lead to a proposition that banks may be keeping a very large margin as compared with the commercial banks in other countries.

This can be further examined by comparing the actual lending rate with a hypothetical rate which would give a reasonable positive real spread. Given the inflation rates and assuming a 2-percent real spread for all banks, a required lending rate could be constructed as shown in column 1 of Table 3.2. Comparing it with the actual lending rate as shown in column 2, it could be seen that some banks are earning spreads more than necessary while some others are in fact incurring losses in real terms. It is, therefore, necessary for banks who make negative real spreads to immediately examine the loan and deposit portfolios and consider ways of reducing cost of funds.

Second, there is a close association between the level of lending rates and the cost of funds. For instance, the lending rates are higher when cost of funds is higher. Examples are the Philippines and Sri Lanka. On the other hand, lending rates are low when cost of funds is low as in the case of Korea, Taiwan and Thailand. Third, there is no major variation in the level of the lending rate or the cost of funds among different banks in a single country indicating that factors that affect the cost of funds influence all banks in the same way. Fourth, there is a direct and close relationship between the cost of funds and the availability of loanable deposits. As can be seen from Table 3.1, the countries/banks whose loanable deposits are higher, the cost of funds is lower and so is the lending rate. The main reason for a lower share of loanable deposits is the high statutory reserve ratios and the existence of large priority lending programmes and government borrowing.

Administrative Expenses as a Percentage of Total Assets (National Averages): 1993

Indonesia	3.47
Korea	2.23
Malaysia	1.57
Nepal	2.43
Philippines	3.63
Sri Lanka	4.17
Taiwan	0.83
Thailand	1.97
SEACEN Average)	2.54

3.1 Statutory Reserve Requirements (SRR)

This is the second most important factor which affects the cost of funds of commercial banks. Reserve requirements allow only a fraction of deposits to be loaned. Therefore, the lending rate must exceed deposit rate to cover at least the total interest due on deposits. For example, assume a reserve requirement of 15 percent. This means that only 85 percent of deposits can be loaned out and 15 percent to be held in the form of assets specified by the Central Bank which in most cases bear no interest. Thus, it can be seen that deposit rates can only be 85 percent of the rates on loans ignoring other costs or profits.

There is a constant proportional relationship between deposit and lending rates which has implications for the absolute spread. As deposit rates increase, as shown in Table 3.3, with a 15-percent reserve requirement and no bank costs or profits, the absolute spread increases from 1.76 percent to 3.53 percent (column 4) as the deposit rate increases from 10 percent to 20 percent (column 2), although deposit rate remains a constant 0.85 of the lending rate (column 5). This means that when deposit rates are low, reserve requirements have a small impact on the cost of loans. However, when deposit rates increase, the same reserve requirements can raise the cost of loanable funds substantially.

Table 3.4 gives a breakdown of the statutory reserve requirements for SEACEN countries for 1993. The weighted averages of the ratios used together with other requirements such as liquid asset ratios and

Table 3.1

COST OF FUNDS AND LENDING RATE

Country		Loanable Deposits (1-p)	Cost of Funds (%)	Administrative Expenses a	Provision for Loan Losses l	Other Charges, etc. k	Total (a+l+k) (%)	Lend'g Rate (excl. profit margins) P_{L1}	Actual Lending Rate P_{L2}	Spread D	Inflation Rate (%)	Real Spread
Indonesia	*Bank A*	0.979	10.590	0.023	0.015	0.000	3.800	14.390	17.500	3.110	9.95	2.83
	Bank B	0.979	10.339	0.015	0.004	0.000	1.920	12.259	19.000	6.741	9.95	6.13
	Bank C	0.980	9.280	0.066	0.013	0.000	7.830	17.110	22.000	4.890	9.95	4.45
Korea	*Bank A*	0.711	7.471	0.024	0.005	0.000	2.810	10.281	9.840	-0.441	4.82	-0.42
	Bank B	0.728	7.428	0.023	0.004	0.000	2.660	10.088	9.770	-0.318	4.82	-0.30
	Bank C	0.700	6.387	0.020	0.006	0.000	2.500	8.887	7.680	-1.207	4.82	-1.15
Malaysia	*Bank A*	0.655	7.487	0.015	0.007	0.000	2.230	9.717	9.970	0.253	3.54	0.24
	Bank B	0.667	7.843	0.017	0.007	0.000	2.400	10.243	9.970	-0.273	3.54	-0.26
	Bank C	0.706	8.598	0.015	0.002	0.000	1.730	10.328	9.970	-0.358	3.54	-0.35
Nepal	*Bank A*	0.756	8.029	0.023	0.004	0.000	2.670	10.699	19.000	8.301	15.33	7.20
	Bank B	0.736	8.507	0.023	0.000	0.000	2.340	10.847	19.000	8.153	15.33	7.07
	Bank C	0.790	5.137	0.027	0.009	0.000	3.590	8.727	19.000	10.273	15.33	8.91
Philippines	*Bank A*	0.638	14.547	0.034	0.004	0.004	4.141	18.688	18.094	-0.594	7.59	-0.55
	Bank B	0.710	11.873	0.033	0.001	0.003	3.737	15.610	12.141	-3.469	7.59	-3.22
	Bank C	0.709	12.777	0.042	0.001	0.005	4.700	17.478	14.765	-2.713	7.59	-2.52
Sri Lanka	*Bank A*	0.589	11.488	0.042	0.000	0.000	4.220	15.708	20.400	4.692	11.74	4.20
	Bank B	0.572	14.898	0.048	0.000	0.000	4.840	19.738	20.400	0.662	11.74	0.59
	Bank C	0.556	16.917	0.035	0.003	0.000	3.750	20.667	20.400	-0.267	11.74	-0.24
Taiwan	*Bank A*	0.775	6.152	0.009	0.001	0.000	0.920	7.072	9.450	2.378	2.94	2.31
	Bank B	0.770	5.948	0.010	0.000	0.000	1.060	7.008	9.150	2.142	2.94	2.08
	Bank C	0.774	6.130	0.006	0.001	0.000	0.700	6.830	9.700	2.870	2.94	2.79
Thailand	*Bank A*	0.815	5.815	0.018	0.008	0.000	2.610	8.425	11.540	3.115	3.36	3.01
	Bank B	0.835	5.945	0.019	0.006	0.000	2.480	8.425	12.920	4.495	3.36	4.35
	Bank C	0.830	5.912	0.022	0.004	0.000	2.520	8.432	12.720	4.288	3.36	4.15

Table 3.2

LENDING RATE REQUIRED TO ACHIEVE 2-PERCENT REAL SPREAD

Country		Required Lending Rate (1)	Actual Lending Rate (2)	Difference (excess or shortfall) (3)
Indonesia	*Bank A*	16.47	17.50	1.03
	Bank B	14.34	19.00	4.66
	Bank C	19.20	22.00	2.80
Korea	*Bank A*	12.27	9.84	-2.43
	Bank B	12.08	9.77	-2.31
	Bank C	10.89	7.68	-3.21
Malaysia	*Bank A*	11.67	9.97	-1.70
	Bank B	12.20	9.97	-1.70
	Bank C	12.27	9.97	-2.30
Nepal	*Bank A*	12.90	19.00	6.10
	Bank B	13.04	19.00	5.96
	Bank C	10.97	19.00	8.03
Philippines	*Bank A*	20.62	18.09	-2.53
	Bank B	17.60	12.14	-5.46
	Bank C	19.45	14.77	-4.68
Sri Lanka	*Bank A*	17.75	20.40	2.65
	Bank B	21.72	20.40	-1.32
	Bank C	22.60	20.40	-2.20
Taiwan	*Bank A*	9.05	9.45	0.40
	Bank B	8.99	9.15	0.16
	Bank C	8.82	9.70	0.88
Thailand	*Bank A*	10.42	11.54	1.12
	Bank B	10.42	12.92	2.50
	Bank C	10.43	12.72	2.29

priority sector lending programmes of government which affect the quantum of loanable funds are shown in Table 3.5.

An explanatory note on the three columns, liquid asset ratio, priority lending programmes and government borrowing as shown in Table 3.5 is in order at this point. As for liquid assets, we have used the actual rates applicable to commercial banks. For priority sector lending programmes, the actual amount lent to such sectors in various forms were taken as a share of total deposits. There was, however, no reliable data on the amount of government borrowing from the respective banks for all countries. For some countries, government borrowing did not exist. Korea, Malaysia and Taiwan had reported no government borrowing. For Indonesia, Nepal and Thailand, figures reported by the respective central banks were used. For the Philippines and Sri Lanka, it was assumed that at least 10 percent of the deposits are allocated for government borrowing requirements.

As for yield rates, the relevant rates or closest approximations were used. For example, rates applicable to liquid assets such as short-term Treasury bills were used in case of such liquid assets. For priority sector lending programmes, the weighted average deposit rate was used. In the case of government borrowing in Indonesia, the average base lending rate for state banks was used while the weighted average interest rate was assumed for other countries.

The loanable deposits in the last column of Table 3.5 must be read with caution. The reason is that at least some of the funds set aside for SRR, liquidity ratios and priority sector lending earn interest and they also form part of loanable funds even though the rates may be below market rates. Insofar as SRR is concerned, only two out of ten SEACEN countries pay interest on SRR. All other countries pay no interest on SRR. As such, SRR directly reduces the quantum of loanable funds. As can be seen from Table 3.4, Indonesia has the lowest SRR of 2 percent and consequently, the highest ratio of loanable funds.

The Philippines has the highest SRR followed by Taiwan and Sri Lanka. The Table also shows that while there is an inverse relationship between SRR and loanable deposits, the other factors, namely liquid ratios, government borrowing and priority sector lending can greatly influence the loanable fund ratio irrespective of the level of the SRR. For instance, even though Sri Lanka's SRR is lower than that of the

Table 3.3

RELATIONSHIP BETWEEN RESERVE REQUIREMENT, DEPOSIT RATE, THE LOAN RATE AND THE SPREAD

(1) Reserve Requirement (%)	(2) Deposit Rate 1/ (%)	(3) Required Loan Rate	(4) Spread (3)-(2)	(5) (2)/(3)
15	10	11.76	1.76	0.85
15	12	14.12	2.12	0.85
15	14	16.47	2.47	0.85
15	16	18.82	2.82	0.85
15	18	21.18	3.18	0.85
15	20	23.53	3.53	0.85

1/ $\text{Required Loan Rate} = \frac{\text{Deposit Rate}}{\text{1-Reserve Requirement}}$

Table 3.4

STATUTORY RESERVE REQUIREMENTS OF COMMERCIAL BANKS: 1993

Country	Demand Deposit	Savings Deposit	Time Deposit	Weighted Average
Indonesia	2.0	2.0	2.0	2.0
Korea	11.5	11.5	11.5	11.5
Malaysia	8.5	8.5	8.5	8.5
Myanmar	10.0	5.0	-	-
Nepal	12.0	12.0	12.0	12.0
Philippines	22.0	22.0	22.0	22.0
Singapore	6.0	6.0	6.0	6.0
Sri Lanka	15.0	15.0	15.0	15.0
Taiwan 1/	26.25	8.125	10.125	15.7
Thailand	7.0	7.0	7.0	7.0

1/ SRR for Taiwan are as follows:

(i)	Checking Accounts	- 26.25%
(ii)	Passbook Deposits	- 24.25%
(iii)	Passbook Savings Deposits	- 16.75%
(iv)	Time Savings Deposits	- 8.125%
(v)	Time Deposits	- 10.125%

The weighted average was arrived at by taking into account all the five categories of deposits and their SRRs.

Table 3.5

STATUTORY REQUIREMENTS AND LOANABLE DEPOSITS

Country		Statutory Reserve Ratio *(p1)*	Liquid Asset Ratio *(p2)*	Priority Lending Programs *(p3)*	Loanable Deposits *(1-p)*
Indonesia	*Bank A*	0.020	0.000	0.001	0.979
	Bank B	0.020	0.000	0.001	0.979
	Bank C	0.020	0.000	0.000	0.980
Korea	*Bank A*	0.115	0.000	0.174	0.711
	Bank B	0.115	0.000	0.157	0.728
	Bank C	0.115	0.000	0.185	0.700
Malaysia	*Bank A*	0.085	0.170	0.090	0.655
	Bank B	0.085	0.170	0.078	0.667
	Bank C	0.085	0.170	0.039	0.706
Nepal	*Bank A*	0.120	0.000	0.124	0.756
	Bank B	0.120	0.000	0.144	0.736
	Bank C	0.120	0.000	0.090	0.790
Philippines	*Bank A*	0.220	0.000	0.142	0.638
	Bank B	0.220	0.000	0.070	0.710
	Bank C	0.220	0.000	0.071	0.709
Sri Lanka	*Bank A*	0.150	0.200	0.061	0.589
	Bank B	0.150	0.200	0.078	0.572
	Bank C	0.150	0.200	0.094	0.556
Taiwan	*Bank A*	0.155	0.070	0.000	0.775
	Bank B	0.160	0.070	0.000	0.770
	Bank C	0.156	0.070	0.000	0.774
Thailand	*Bank A*	0.070	0.000	0.115	0.815
	Bank B	0.070	0.000	0.095	0.835
	Bank C	0.070	0.000	0.100	0.830

Philippines, loanable funds of commercial banks in Sri Lanka are lower than those in the Philippines due to the presence of liquidity ratio requirements (LRR). However, as mentioned before, Sri Lanka's liquid assets include Treasury bills which at times earn interest of even more than the 1-year time deposit rates at commercial banks. Any interest earned on SRR, LRR or priority sector lending programmes is taken into account when computing the cost of funds of commercial banks. Annexes I and II give the details of the SRR and priority lending programmes implemented by each SEACEN country.

3.2 Composition of Deposits

The three important aspects of deposits in the way they affect the cost of funds are: (i) the composition of the deposit base, (ii) the maturity structure, and (iii) the interest rates on different types of deposits and maturities. As regard the composition, three main categories of deposits could be observed in the SEACEN countries. There are demand, savings and time deposits. Typically, demand deposits earn no interest, even though banks in some countries have, since of late, started paying interest, albeit a small percentage (e.g., Indonesia and Korea) on such deposits. Since demand deposits do not earn interest, having a larger share of demand deposits is always advantageous to banks as it will reduce the cost of funds. Savings deposits earn interest but generally lower than that for time deposits. Different banks in different countries rely in different degrees on the demand, savings and time deposits to mobilise funds. Bank C in Nepal has a large share of deposits in demand deposits making the weighted average interest rate lower and cost of funds much lower than that of the other two banks. Similarly, the lower the interest paid on savings or time deposits, the lower the cost of funds for the banks.

For instance, Malaysia and Thailand have a higher share of deposits in time deposits and the interest rates on such deposits were lower than those in other countries. As a result, their costs of funds are lower. However, in view of increasing inflation rates and opportunity costs of alternative investment avenues, the customers request higher rates for their deposits. At the same time, increasing competition among commercial banks to attract customers lead to payment of high rates and even payment of interest on demand deposits. From the customers' point of view, there is still a need to keep a certain minimum amount of deposits in the form of demand deposits in view of their daily cash

requirements, and a large amount of very short-term transactions undertaken and payments being settled.

The composition of deposits in the three selected banks in 1993 are given in Table 3.6. According to the Table, the share of demand deposits varies not only across countries but also among individual banks within a country. In general, Taiwan mobilises about 33-36 percent or about one-third of the total deposits from current accounts. This is, on average, the highest among the SEACEN countries. In Indonesia, 23-26 percent or, about one-fourth of the deposits are mobilised from demand deposits. In other countries, the share of demand deposits is less, the lowest being Thailand with about 4 percent of total deposits. This decline in demand deposits was evident even in the early 1970s.[6] An example of a wide variation in the demand deposit ratio within a country is Nepal where the ratio varies between 15 percent in one bank to 40 percent in another. As can be seen in Table 3.2, the cost of funds in this bank is substantially lower due to the high proportion of demand deposits. In general, it is observed that the higher the share of demand deposits in total deposits, the lower is the weighted average interest rate and cost of funds.

A comparison of the demand deposit ratio for 1993 with that of 1980 (please see Table 3.7) shows that there is a substantial drop in the ratio in most banks and in most countries. For instance, the ratio dropped from 70 percent for Bank A in Indonesia in 1980 to 23 percent in 1993. Bank B also faced a similar plight with demand deposits falling from 82 percent of total deposits in 1980 to 27 percent in 1993. Bank C also experienced a drop from 79 percent in 1980 to 26 percent in 1993. In Korea, a drop was evident in respect of two banks and in the case of the third, the share of demand deposits has actually increased. In other countries, except for the third Bank C in Nepal for which data for the earlier year were not available, the share of demand deposits has declined over the years. Although cost of funds' calculation for 1980 is not available for comparison, there is no doubt that the declining share of the demand deposits in total deposits has been a major cause of high cost of funds of commercial banks in the SEACEN countries in 1993.

6. Chaipravat Orlan, p. 8.

Table 3.6

COMPOSITION OF DEPOSITS AND INTEREST RATES

Country		Share of Deposits in Total			Interest Rates on Deposits			Weighted Average Interest Rate
		Demand Deposits *(DD)*	Savings Deposits *(SD)*	Time Deposits *(TD)*	Demand Deposits *(DD)*	Savings Deposits *(SD)*	Time Deposits *(TD)*	*(r)*
Indonesia	*Bank A*	0.232	0.257	0.511	0.050	0.120	0.120	0.104
	Bank B	0.267	0.225	0.508	0.050	0.120	0.120	0.101
	Bank C	0.256	0.444	0.301	0.050	0.105	0.105	0.091
Korea	*Bank A*	0.225	0.303	0.471	0.007	0.058	0.094	0.064
	Bank B	0.189	0.267	0.544	0.003	0.031	0.101	0.063
	Bank C	0.140	0.522	0.337	0.005	0.040	0.097	0.054
Malaysia	*Bank A*	0.204	0.187	0.608	0.000	0.033	0.078	0.054
	Bank B	0.221	0.082	0.696	0.000	0.033	0.078	0.057
	Bank C	0.121	0.121	0.758	0.000	0.033	0.078	0.063
Nepal	*Bank A*	0.179	0.303	0.519	0.000	0.075	0.090	0.069
	Bank B	0.153	0.239	0.609	0.000	0.075	0.090	0.073
	Bank C	0.404	0.258	0.338	0.000	0.070	0.080	0.045
Philippines	*Bank A*	0.082	0.565	0.352	0.000	0.096	0.153	0.108
	Bank B	0.104	0.558	0.338	0.000	0.075	0.144	0.091
	Bank C	0.061	0.573	0.366	0.000	0.095	0.118	0.098
Sri Lanka	*Bank A*	0.284	0.392	0.324	0.000	0.146	0.164	0.110
	Bank B	0.157	0.390	0.453	0.000	0.145	0.165	0.131
	Bank C	0.148	0.270	0.582	0.000	0.153	0.175	0.143
Taiwan	*Bank A*	0.333	0.007	0.660	0.000	0.018	0.078	0.052
	Bank B	0.364	0.007	0.630	0.000	0.021	0.079	0.050
	Bank C	0.338	0.007	0.656	0.000	0.026	0.078	0.051
Thailand	*Bank A*	0.039	0.260	0.701	0.000	0.050	0.068	0.060
	Bank B	0.039	0.260	0.701	0.000	0.050	0.068	0.060
	Bank C	0.039	0.260	0.701	0.000	0.050	0.068	0.060

A small share of demand deposits also means that a large share is in the other two types, namely savings and time deposits on which banks have to pay interest. Since these are the main sources of funds for commercial banks and interests have to be paid on them, they are also the single most important factor which determines the cost of funds of commercial banks. If interest rates on both savings and time deposits are identical, then the impact of the two types of deposits may be similar. However, since there are no identical savings and time deposit rates, an exception being Indonesian banks, and there are different maturity patterns in time deposits, the impact of each type of deposit and each maturity on the cost of funds would be dissimilar. When time deposits have maturities ranging from 1 month, 3 months, 6 months, 12 months or 24 months and above with interest rates in ascending order, the chances are that the bulk of the deposits is in time deposits (Malaysia and Taiwan). This however depends, among other things, on the inflation rate and the short-, medium- and long-term perception of the political-economic environment of the country. In the SEACEN countries, differences exist in maturities of time deposits. They range from 1 to 24 months in general and even longer in some cases. Savings deposits represent the lowest end of the term structure of deposits while 24 months or higher time deposits represent the upper end of the deposit structure. Interest rates too generally follow this trend. Table 3.6 also presents the shares of savings and time deposits as well as the relevant interest rates for 1993.

The Table shows that, in general, most banks have a higher share of savings deposits than demand deposits. The exceptions are Malaysia and Taiwan. The low savings deposit ratio in these two countries is reflected in a higher time deposit ratio. The reason for the heavy concentration in time deposits is the existence of time deposits with maturities of 1 month (Taiwan), or 3 months (Malaysia) onwards and our inclusion of those deposits under time deposits.

In most banks and most countries, the concentration on time deposits is higher than on other two types of deposits. In the Philippines, however, the bulk of the deposits is in savings. Since the interest rates on time deposits, in general, are higher in all banks and in all countries, they will have a very significant impact on the cost of funds. If, on the other hand, the interest rates on time deposits are low, then even with a high concentration of time deposits, their impact on the cost of funds will be low. For instance, Thailand has the highest

Table 3.7

SHARE OF DEMAND DEPOSITS IN TOTAL DEPOSITS FROM CUSTOMERS IN SELECTED SEACEN COUNTRIES
(Percent)

Country	Bank A		Bank B		Bank C	
	1980	1993	1980	1993	1980	1993
Indonesia	69.80	23.18	81.87	26.69	78.95	25.55
Korea	28.14	22.54	27.93	18.90	8.30	14.04
Malaysia	-	20.45	-	22.14	-	12.11
Nepal	27.94	17.85	26.42	15.28	-	40.43
Philippines	13.11	10.40	16.91	6.14	17.08	5.55
Sri Lanka	46.65	27.61	31.00	15.60	24.44	14.81
Taiwan	-	33.32	-	36.37	-	33.76

share of time deposits with 70 percent,[7] but its interest rates on time deposits average about 6.8 percent compared to more than 7 percent in all other countries. Hence, Thailand also has the lowest cost of funds among the SEACEN countries.

Although the share of time deposits in total deposits is generally higher in most countries, according to the limited data available (Table 3.9), this share has diminished in more cases compared to the year 1980. On the other hand, as seen in Table 3.8, the share of savings deposits has increased in most banks between 1980 and 1993. If this trend continues, it will help the banks with their cost of funds as the interest rates on savings deposits are lower. However, it is imperative that not only the relative level but also the absolute level of the interest rate be lower in order for a higher ratio of savings deposits to have a lesser impact on the cost of funds.

3.3 Administrative and Other Costs

Administrative and other costs such as provisioning for loan losses, various taxes and margins are typically a small component of the total assets of a commercial bank. If operating costs increase due to poor management, large staff costs, heavy loan losses or various taxes and charges, this condition will reflect the banks' increasing inefficiency causing lending rates also to rise. Table 3.1 has a breakdown of operating costs into administrative costs, provision for loan losses and taxes, charges, etc. The column labelled 'lending rate excluding profit margins' is the sum of 'cost of funds' and all operating costs. It is assumed that any difference between the actual lending rate and the derived lending rate is the margin for profits.

According to the Table, administrative expenses are highest in Sri Lanka followed by the Philippines. In Sri Lanka, the staff costs are said to be extremely high especially in the case of the two largest banks. This is a major cause of high lending rates as the two largest banks dominate the financial sector in the country.

7. Subject to the accuracy of the breakdown. Since the breakdown for 1993 was not available, we applied the 1992 breakdown (percent share) to 1993 total deposit figures to get breakdown for 1993.

Table 3.8

SHARE OF SAVINGS DEPOSITS IN TOTAL DEPOSITS FROM CUSTOMERS IN SELECTED SEACEN COUNTRIES
(Percent)

Country	Bank A		Bank B		Bank C	
	1980	1993	1980	1993	1980	1993
Indonesia		25.69		22.50		44.39
Korea	15.33	30.33	14.07	26.72	73.38	52.21
Malaysia	-	18.73	-	8.22	-	12.12
Nepal	18.09	30.27	16.16	23.87	-	25.76
Philippines	48.61	55.78	37.38	57.78	49.50	70.55
Sri Lanka	9.25	38.14	24.22	38.84	16.79	26.97
Taiwan	-	0.67	-	0.67	-	0.65

Table 3.9

SHARE OF TIME DEPOSITS IN TOTAL DEPOSITS FROM CUSTOMERS IN SELECTED SEACEN COUNTRIES
(Percent)

Country	Bank A		Bank B		Bank C	
	1980	1993	1980	1993	1980	1993
Indonesia	-	51.13	-	50.81	-	30.05
Korea	56.54	47.13	56.00	54.38	18.33	33.75
Malaysia	-	60.83	-	69.65	-	75.76
Nepal	54.16	51.86	57.65	60.87	-	33.81
Philippines	38.28	33.82	45.71	36.08	33.42	23.90
Sri Lanka	-	31.50	-	45.12	-	50.97
Taiwan	-	66.01	-	62.95	-	65.59

In the Philippines and Sri Lanka, the national average of the administrative expenses are 3.63 percent and 4.17 percent of total assets of the banks respectively. These figures are way above the SEACEN averages as given in Table 3.10. The implication is that if the administrative costs can be brought down, for example, to the level of Korea (2.23), Malaysia (1.57), Taiwan (0.83) or Thailand (1.97), there is a good chance of reducing the lending rates by 2 to 3 percentage points in the Philippines and Sri Lanka.

Table 3.10

ADMINISTRATIVE EXPENSES AS A PERCENTAGE OF TOTAL ASSETS (NATIONAL AVERAGES): 1993

Country	Administrative Expenses as % of Total Assets
Indonesia	3.47
Korea	2.23
Malaysia	1.57
Nepal	2.43
Philippines	3.63
Sri Lanka	4.17
Taiwan	0.83
Thailand	1.97
SEACEN Average	2.54

There appears to be uniform method or practice among the banks within a country or among countries with regard to provisioning for doubtful and bad loans. Although such loans have the highest risk ratios in computing capital adequacy requirements, their treatment in profit and loss accounts is rather uneven. Sometimes, the banks do not show any provisioning even though they have large portions of non-performing assets, due to fear of being labelled as a poorly managed

bank. Some banks show very small provisioning although actual loan losses are very high. In one of the countries in our sample, the loan losses were as high as 8 percent of the total loan portfolio due mainly to the existence of directed lending programmes to priority sectors/ groups. According to Table 3.1, Sri Lanka has the highest provisioning for loan losses especially for the first two banks caused by a large amount of non-performing loans, mainly those guaranteed by or directed by the Government. It is therefore imperative that loan recovery rates are improved with the assistance from the Government by way of reduced intervention. In fact, in Sri Lanka, debt recovery laws have been enacted to improve loan recovery which will help bring down interest rates and spreads.

As for taxes, charges, etc., we have information on the Philippines where explicit taxes or charges are being levied on the banks which have a bearing on the lending rates. The Philippines has a Gross Receipt Tax (GRT) on interest, commissions and discounts from lending activities as well as income from financial leasing, on the basis of remaining maturities of instruments from which such receipts are derived. The computation is as follows:

(i)	Short-Term Maturity (not more than 2 years)	–	5%
(ii)	Medium-Term Maturity (more than 2 but not more than 4 years)	–	3 %
(iii)	Long-Term Maturity:		
	(a) Over 4 years but not more than 7 years	–	1 %
	(b) Over 7	–	0 %

In addition, an insurance premium is also paid to the Philippine Deposit Insurance Corporation. All such charges paid as a share of total assets amount to 0.3 percent to 0.5 percent in the case of Philippine commercial banks. Though small, it does have an impact on the lending rates of that country. Further, there are other charges that banks levy on customers. The banks generally charge a documentary stamp fee of thirty centavos for every two hundred pesos on promissory notes and notarial fees and registration feeds in the case where the loan is secured by real estate mortgage. Although other countries have not specifically mentioned, this type of charges exist in almost all countries but they are generally built into the lending rate. Additionally, one should not forget the other hidden costs such as bank robberies, insurance and supervision charges that may have a bearing on the lending rate.

On average, Sri Lanka has the highest ratio of operating costs to total assets. The Philippines too has very high operating costs due to high administrative expenses. Bank C of Indonesia reports an operating cost figure of 7.8 percent of total assets indicating grave inefficiencies in that bank. A comparison of operating costs and lending rates indicates that operating costs are a major cause of high lending rates in certain SEACEN countries. Not surprisingly, those countries (and banks) which have high operating costs also have higher cost of funds than others.

Another aspect to look at is the impact of profit-taking decision on the lending rate. In other words, one can look at the impact of expected return on shareholders' funds on the lending rate. Generally, profits are earned first and the return to shareholders (dividends/profits) determined on the basis of earned profits. In such a situation, existing lending rate determines the level of profits. In some countries, there are profit targets to be met for each year and banks have to add a certain percentage to the lending rate in order to achieve the annual target. Table 3.11 represents a hypothetical situation similar to this where shareholders request 10-percent return and 15-percent return on their shares. The required lending rates for two scenarios are given in the first two columns. The last two columns show the excess profits (+) or losses (-) that banks may make if the two profit rates are applied. It will be seen that in most countries the profit decisions, whether 10 percent or 15 percent, have a marginal impact on the lending rate.

The size of each component in the lending rate, excluding the profit margins, is shown elsewhere (Table 3.1). Apart from the influence of profit margins, the Table clearly indicates that the major reason for the high lending rates in most countries is the very high cost of funds caused by the large reserve requirements, government borrowing and priority lending schemes. In addition, high deposit rates have been the most significant contributory factor. It is assumed that the difference between the actual lending rate charged and the derived lending rate is the margin for expected profits. The last column of the Table shows the real spread, i.e., nominal spread adjusted for inflation. According to the Table, the real spread varies substantially across countries. If, for example, a real spread of more than 2 percent is considered high, then Indonesian, Nepalese, Taiwanese and Thai commercial banks can be thought of making excessive profits. It should be noted that in the absence of actual lending rates for Malaysia, Nepal

and Sri Lanka, we have used the average lending rates for the whole banking system. The conclusions are, therefore, subject to the accuracy of the actual lending rates.

If, for example, a real spread of 2 percent is considered to be an adequate margin, according to Tables 3.1 and 3.2, some commercial banks might appear as making excess profits while some others may be seen as uncompetitive. For instance, Indonesian, Nepalese and Thai banks earn real spread in excess of 2 percent while Korean, Malaysian, Philippine and Sri Lankan banks are unable to maintain a positive real spread. Taiwanese banks can just break even. These estimates are based on average lending rates. It should be noted that in the absence of actual lending rates for Malaysia, Nepal and Sri Lanka, we have used the average lending rates for the whole banking system. The conclusions are, therefore, subject to the accuracy of the actual lending rates. Yet, a point to note is that the real spread reported here may have no relevance to the profit margins because banks can make large profits by engaging in fee-based activities.

4. Policy Alternatives

It was revealed from the foregoing analysis that composition of deposits, high deposit rates, statutory reserve requirements, priority sector lending, government borrowing and high operating costs have been the major factors determining the level of lending rates in the SEACEN countries. It was also observed that lending rates are higher in some countries than others. Ideally, their levels should be viewed against the general economic conditions including the rate of inflation in the respective countries. Nevertheless, it will be worthwhile to consider the possibility of influencing the factors over which the authorities could have some control especially in cases where the cost of funds and lending rates appear to be too high such that it affects investment activity in the country. The factors that can be influenced directly or indirectly to reduce cost of funds are the deposit rates, statutory reserve requirements, priority sector lending and government borrowing. A reduction in the lending rate can be achieved apart from a reduction in the cost of funds, by a reduction in operating costs which may include administrative expenses, loan losses, etc., as well. In the following section, we will briefly discuss some hypothetical results arising from changes in the aforementioned factors.

Table 3.11

LENDING RATE REQUIRED TO ACHIEVE 10% AND 15% RETURN ON EQUITY

Country		Required Lending Rate with 10% Return	Required Lending Rate with 15% Return	Difference (Excess or Shortfall) with 10% Return	Difference (Excess or Shortfall) with 15% Return
Indonesia	*Bank A*	10.812	10.853	6.69	6.65
	Bank B	8.571	8.624	10.43	10.38
	Bank C	16.917	16.986	5.08	5.01
Korea	*Bank A*	10.684	10.886	-0.84	-1.05
	Bank B	10.880	11.276	-1.11	-1.51
	Bank C	9.582	9.930	-1.90	-2.25
Malaysia	*Bank A*	7.575	7.673	2.39	2.30
	Bank B	8.445	8.692	1.53	1.28
	Bank C	8.520	8.700	1.45	1.27
Nepal	*Bank A*	9.949	9.949	9.05	9.05
	Bank B	10.299	10.299	8.70	8.70
	Bank C	7.645	7.645	11.35	11.35
Philippines	*Bank A*	16.670	16.786	1.42	1.31
	Bank B	13.968	14.320	-1.83	-2.18
	Bank C	15.679	15.786	-0.91	-1.02
Sri Lanka	*Bank A*	18.780	18.811	3.22	3.19
	Bank B	23.947	24.177	-1.95	-2.18
	Bank C	21.221	21.252	0.78	0.75
Taiwan	*Bank A*	7.176	7.228	2.27	2.22
	Bank B	7.083	7.121	2.07	2.03
	Bank C	6.966	7.034	2.73	2.67
Thailand	*Bank A*	9.007	9.304	2.53	2.24
	Bank B	8.928	9.182	3.99	3.74
	Bank C	9.090	9.422	3.63	3.30

4.1 A Change in Statutory Reserve Requirements (SRR)

SRR is an important monetary policy instrument for all central banks. By varying the level of SRR, the central banks can either increase or decrease the credit-creating capacity of commercial banks thus influencing the money supply. The level of the SRR, therefore, depends on the central banks' monetary policy stance and its estimation of the liquidity situation in the country. While we do not delve into the monetary policy considerations, we will only indicate the impact that a change in SRR could make to the cost of funds.

Column 1 of Table 3.12 gives the cost of funds with no change in any of the policy variables. Column 2 shows the level of cost of funds after a reduction of the SRR by 1 percentage point. It indicates that a small change, e.g., 1-percentage point change in SRR will have little impact, i.e., less than 1 percent on the cost of funds of commercial banks, although it directly impacts on the loanable deposits. The reason is that the impact of the reserve requirement is overshadowed by the impact of the very high interest rates on deposits, the bulk of the deposits being in time deposits with higher rates than for savings and demand deposits. Therefore, unless the SRR is changed substantially, a significant change in cost of funds cannot be expected. Hence, the SRR cannot be considered as a suitable variable to be used to influence lending rates. Besides, the use of SRR as an effective monetary policy instrument should not be compromised in order to make a very small change in the cost of funds.

4.2 A Change in Deposit Rates

Column 3 of Table 3.12 gives the results after a 1-percent change in the deposit rates, both savings and time deposits. According to the Table, a 1-percent reduction in the deposit rates can trigger more than 1-percent reduction in the cost of funds. Interest rates on deposits being the largest component in the cost of funds, given the bulk of savings are in savings and time deposits with high interest rates, the impact of a change in deposit rates on cost of funds is quite significant. In a change in interest rates, however, one has to consider the inflation rates and ensure that the depositors get a reasonable positive real interest rate. Considering the inflation rates that prevailed in 1993, there appeared no room for reduction in deposit interest rates in any of the SEACEN countries. This may become even more difficult as

financial institutions are competing among themselves by offering competitive rates and new deposit mobilising instruments to the public to attract funds. However, if inflation was brought down further, it would be possible to reduce the deposit rates.

Easing of interest rates should follow from an increase in liquidity in the banking system. Such an increase in liquidity could take place with increased inflow of foreign exchange, enhanced deposit mobilisation, changes in reserve requirements or by a deliberate policy of the central bank to reduce interest rates. Central banks are careful in effecting an interest rate cut that would trigger system-wide interest rate reductions as they are aware of the consequences on the money supply and implications on the exchange rate.

The interest rate is one of the most important targets through which monetary policy is transmitted to the economy. The central banks therefore can exert a considerable influence on interest rates through the conduct of monetary policy. However, such policy is conducted with a good purpose and definite targets and objectives in mind. There are many ways in which the central bank may influence the rates. They vary from country to country. For instance, in Indonesia, interest rates are influenced through reserve requirements, discount rate and by moral suasion. In fact, Indonesia brought down the SRR from 15 percent to 2 percent in 1988 with a view to lowering interest rates. Interest rates on Bank Indonesia Certificates (SBI) and Money Market Securities (SBPU) were reduced.

The Bank of Korea generally influenced the interest rates through its discounting policy, open market operations, reserve requirements and direct interest rate regulation. However, under the Medium and Long-Term Plan for Interest Rate Deregulation launched in 1991, interest rates will be completely deregulated by the end of the 1990s. In Myanmar, the interest rates are influenced through the change in the bank rate (discount rate) while in Malaysia, discount rate, reserve requirements and open market operations are used. In Nepal, bank rate is the main instrument which is reinforced by the use of moral suasion. The Philippines can also use the traditional monetary policy instruments even though the interest rates are completely deregulated. The Monetary Authority of Singapore can influence interest rates through foreign exchange swaps, direct borrowing or lending transactions in Singapore Government Securities. The objectives are to maintain

Table 3.12

CHANGES IN COST OF FUNDS
IN RESPONSE TO CHANGES IN POLICY

Country		No Change	1% Change in SRR	1% Change in T & S	No Priority Lending	No Government Lending	1% Change in in SRR & 1% Change in T&S Deposit Rates
		(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Indonesia	*Bank A*	6.931	6.802	5.477	6.936	10.590	5.375
	Bank B	6.546	6.426	5.172	6.551	10.339	10.339
	Bank C	8.950	8.855	8.146	8.950	9.280	8.058
Korea	*Bank A*	7.471	7.367	6.359	7.182	7.471	6.293
	Bank B	7.428	7.327	6.347	7.174	7.428	6.228
	Bank C	6.387	6.297	5.201	6.097	6.387	5.086
Malaysia	*Bank A*	5.150	5.072	3.949	5.144	5.150	3.890
	Bank B	5.550	5.468	4.389	5.602	5.550	4.324
	Bank C	6.430	6.340	5.194	6.486	6.430	5.121
Nepal	*Bank A*	7.279	7.126	5.513	7.220	8.029	5.397
	Bank B	7.959	7.786	6.069	7.726	8.507	5.936
	Bank C	4.055	3.993	3.132	4.171	5.137	3.084
Philippines	*Bank A*	11.298	11.164	9.658	12.594	12.253	9.559
	Bank B	9.527	9.440	8.086	9.911	9.925	8.021
	Bank C	10.765	10.658	9.253	11.045	10.908	9.172
Sri Lanka	*Bank A*	11.997	11.756	10.532	11.886	12.506	10.321
	Bank B	16.145	15.810	14.359	15.699	15.945	14.061
	Bank C	17.607	17.319	16.277	17.607	17.407	15.922
Taiwan	*Bank A*	6.152	6.076	5.351	6.152	6.152	5.288
	Bank B	5.948	5.875	5.210	5.948	5.948	5.119
	Bank C	6.130	6.057	5.327	6.130	6.130	5.272
Thailand	*Bank A*	5.801	5.726	4.583	6.516	5.815	4.478
	Bank B	5.942	5.868	4.771	6.510	5.945	4.668
	Bank C	5.906	5.831	4.716	6.514	5.912	4.612

monetary conditions that complement exchange rate policy and to sustain non-inflationary economic growth.

In Sri Lanka, the Treasury bill rate has become the reference rate of interest in the country. This rate is determined by the market. The Central Bank however can influence the general level of interest rates through the use of SRR, bank rate and open market operations. In Taiwan, the most frequently used instrument to influence short-term interest rate is the open market operations while SRR is seldom used due to its strong and immediate impact on market rates. Bank rate is sometimes used to influence rates directly. Thailand relies on moral suasion and the market-based approach. Under the market-based approach, the Bank of Thailand can intervene in the repurchase market with the aim of managing liquidity in the financial system. The money market rates are influenced through this, in addition to SRR and bank rate.

Even though the central banks have an array of instruments to influence the interest rates as discussed above, when and to what extent the interest rates can be adjusted is mainly a monetary policy matter. In most countries, the indirect monetary policy tools of the central banks have not been very effective in moving the interest rate structure to the desired direction. The direct interventions are incompatible with financial liberalisation policies. In this context, the central banks are faced with the crucial task of maintaining interest rates that would yield positive real returns for the depositors and would help banks to reduce their cost of funds while maintaining monetary stability. However, there is little doubt that as inflation and the balance of payments situations are under control, lower interest rates may encourage investment and growth.

4.3 Reduction in Operating Costs

Typically, operating costs are a small fraction of total assets of a bank. In developed countries, they range from 1 percent to 2 percent of total assets. As shown in Table 3.1, operating costs are quite high in SEACEN countries ranging from about 1 percent to over 7 percent in some cases. Generally, all banks in Sri Lanka have very high operating costs, followed by the Philippines. They range from 3-1/2 percent to more than 6-1/2 percent. With very high operating costs caused by large staff costs and almost two-thirds share of the market, the two state banks in Sri Lanka are a major cause of high lending

rates. This has given opportunity for other banks with lower cost of funds and lower operating costs to make very large profits. It has been observed that if operating costs can be brought down particularly by way of minimising staff costs and loan losses, then the lending rate of those countries (banks) can be substantially reduced.

4.4 Elimination of Priority Sector Lending and Government Borrowing from the Banks

Priority sector lending at less than market rates is a common feature in most SEACEN countries. Except in Taiwan and Singapore, all other countries have priority sector lending schemes of some form or another. They may take the form of minimum credit allocation to particular sectors or income groups, lending at lower than market rates, credit guarantee schemes, central bank or government refinance programmes, institutional support or combination of all of the above. In view of the inability of the market mechanism to direct sufficient amount of credit and to uplift the sectors that are of national importance, these programmes have been made part of everyday life of commercial banks by the successive governments. State banks become the first and biggest victim for directed lending programmes of government. Some countries, as part of their financial sector reforms and moves towards market-oriented interest rate policies, have taken steps to reduce the amount of directed lending and refinance, etc., but there still appears to be a fair amount of directed or priority lending in many SEACEN countries. Further, commercial banks in most SEACEN countries are required to contribute to the government budget by way of lending through the purchase of government paper.

What impact does the priority sector lending have on the cost of funds? Columns 4 and 5 of Table 3.12 gives the results. If one compares these results with the situation with no change in priority lending and government borrowing, one would clearly see that there would almost be no impact on the cost of funds and the lending rate by a reduction in such lending. On the contrary, the evidence is that priority lending and lending to government have been quite advantageous to banks as they earn more on such lending, at lowest cost, than on conventional lending. In countries such as Indonesia, Nepal, the Philippines and Sri Lanka, priority lending and the government papers offer very attractive interest rates. Therefore, one wonders whether the banks in these countries would rather prefer to have a certain portfolio

of priority and government lending. According to the Table, when priority and government lending is eliminated, the cost of funds increases marginally in some countries such as Indonesia, Nepal (for government borrowing), the Philippines, Sri Lanka (one bank only) and Thailand. It could be seen that the closer the rate of interest charged on priority sector and government lending gets to the market rates, i.e., non-priority sector loan rates, the smaller will be the impact of such lending on the cost of funds. Our results suggest that one cannot gain much on cost of funds by adjusting the priority sector loans or government lending.

Chapter 4

INTEREST RATE SPREADS AND PROFITABILITY OF COMMERCIAL BANKS IN THE SEACEN COUNTRIES

1. Introduction

In Chapter 3, we discussed the various components of the lending rate, reasons for its divergence across countries and some possible policy measures to reduce it. An assumption made there was that the difference between the actual lending rate and the derived lending rate (excluding profits margins) is the actual margin that the banks keep for profits. We observe that some banks are keeping large real spreads while others are keeping either small or negative real spreads. These conclusions are subject to the accuracy of the actual lending rate used. What relationships do these spreads have with the profitability of the banks? Do they represent profits margins? In this Chapter, we attempt to examine the level of profits and profitability using such concepts as 'net earnings margin', 'net income', 'net interest margin', 'gross earnings margin', 'operating costs', etc. We will then examine whether there is any relationship between the banks' profit motives and the high lending rates in some countries.

On the measures of performance and margins, we closely followed the methodology adopted by Hanson and Rocha (1985). In order to make cross country comparisons easy, the raw data provided in the annual accounts (income/expenditure statements and balance sheets) of commercial banks were reorganised in a homogeneous way. Some banks provided detailed data while others provided summary data. Some banks could provide data for only one year. The definitions and classifications used in annual accounts varied from country to country. For instance, some countries would classify income as 'operating' and 'non-operating' while others classify it as 'interest' and 'other'. The same applies to expenditure as well. A majority of countries and banks used the latter definition and it will be sufficient for our purpose as well so that we can differentiate between interest and non-interest incomes/expenditures and examine the impact of interest rates on such incomes/expenditures. In some cases, a high level of aggregation had to be achieved while in others, even the required details were not available, particularly for 1980. On the whole, it was possible to

classify various items in the income/expenditure statements into the following categories.

	1.	Interest Income	=	RI
(-)	2.	Interest Expense	=	RE
=	3.	Interest Margin	=	RM
(+)	4.	Other Income	=	OI
=	5.	Gross Earnings Margin	=	GM
(-)	6.	Operating Costs	=	OC
=	7.	Net Earnings Margin	=	NM
(-)	8.	Provision for Tax	=	TX
=	9.	Net Income	=	NI

Item 1 refers to interest received from loans and advances. All other income including interest on investments in securities, income from foreign exchange transactions, fees and commissions, etc., are grouped under item 4, "other income". Item 2 includes interest paid on deposits and borrowings. All other expenses such as personnel costs, administrative costs, premises and equipment, loan losses and various fees paid, are grouped under item 6, "operating costs". The difference between the interest income (item 1) and interest expense (item 2) will give the "interest margin" (item 3) or the cost of intermediation paid by the borrowers. The sum of items 3 and 4 gives the broadly defined margin perceived by banks in their financial operations. This can be called the "gross earnings margin" (item 5). This is also generally referred to as the banker's "spread" or the "mark-up".

The "net earnings margin" (item 7) can be obtained by subtracting operating costs (item 6) from the gross earnings margin (item 5). This is, in fact, the bank's income or profits before taxation. The "net income" (item 9) or the net profits are obtained by subtracting the provision for income taxation (item 8) from the net earnings margin (item 7). The above accounting identity enables us to obtain the gross earnings margin (item 5) either by adding items 3 and 4 or adding items 6 and 7. That is,

$$GM = RI - RE + OI \quad (1)$$

$$GM = OC + NM \quad (2)$$

The gross earnings margin as defined in above equations can be referred to as the "costs of financial intermediation".

It has been argued that "operating costs" and "profits" have been the two major structural causes of large spreads and high lending rates in the SEACEN countries. Above methodology helps us to focus specifically on these two causes.

2. Analysis of Margins

2.1 Interest Margins

High interest margins indicate the existence of high lending rates and spreads. The banks may want to make large interest margins for two main reasons: to cover large operating costs arising from operational inefficiency or to cover large loan losses. Table 4.1 presents net interest margins as a percentage of total assets. The margins have been very high in the Philippines and Sri Lanka compared to Taiwan and Korea. Sri Lanka has the highest interest margins. Between 1980 and 1993, the interest margins, i.e., the cost of intermediation, paid by borrowers have risen sharply, by 11 percent and 209 percent in the case of Banks A and B respectively in Sri Lanka. High interest margins in Sri Lanka are the result of a combination of two factors: (i) a change in the portfolio mix of interest-bearing assets, and (ii) an increase in the lending rates to make up for the shortfall in income due to non-performing assets. Because of their dominant position, they can even hold down deposit rates and change the deposit mix in their favour thus contributing to the high interest margins. The second highest margins are reported by the Philippines. Interest margins in Thailand are also very high, second only to the Philippines and have increased tremendously between 1980 and 1993. In the case of Taiwanese commercial banks, the interest margins have declined over the years indicating increasing competition and efficiency in the financial system. In Korea, the margins were even lower than in Taiwan but they have increased over the years.

On average, interest margins are about 4 percent for the Philippines for 1993 which is 50-percent increase over 1980. Interest margins in Thailand too are high at 3.62 percent on average which represents a 110-percent increase over 1980. In Korea, although the interest

margins in 1993 are relatively low, their increase over 1980 is rather high at 76 percent. Taiwan's interest margins in 1993 are the lowest in the SEACEN countries, averaging 1.04 percent of assets which represents a decline of 29 percent over 1980 indicating increased competition in the banking industry. On the whole, it appears that interest margins of commercial banks have increased over the years.

2.2 Gross Earnings Margins

Table 4.2 presents gross earnings margins for the SEACEN countries for 1980 and 1993. Several points can be observed from this Table. First, it appears that Sri Lankan commercial banks have the highest gross earnings margins among all SEACEN countries indicating high costs of financial intermediation. The margins were more than 6 percent in all the three commercial banks in 1993. They ranged from 6.04 percent for Bank C to 6.57 percent for Bank B. Second, there is a substantial increase in the gross earnings margins between 1980 and 1993 in Sri Lanka's, the Philippines' and Thailand's commercial banks. In Taiwan, there is a clear decline in the margins and in Korea, although a decline can be seen, except for Bank C, it is less rapid than in Taiwan. Indonesia's Bank C reports the highest gross earnings margin of 6.77 for 1993. On average, Sri Lanka's gross earnings margins at 6.29 percent in 1993 were very high and represented an increase of 47 percent over 1980. In the Philippines, gross earnings margin has increased by 53 percent in 1993 compared with 1980. Thailand's gross earning margins were also high at 4.46 percent which was an increase of over 116 percent compared to 1980. In contrast to the trend in net interest margin, Korea's gross earnings margin, on average, declined from 3.71 percent in 1980 to 3.53 percent in 1993. The decline would have been higher were it not for the 42-percent increase of gross earnings margin for Bank C. Taiwan showed a decline in average gross earnings margin of about 30 percent. Thus, both these countries indicate a reduction in the cost of financial intermediation.

2.3 Operating Costs

Gross earnings margins alone cannot tell the story of margins and profits. They have to be viewed against the administrative or operating costs. Table 4.3 presents the ratios of operating costs to total assets. According to the Table, the operating costs are also the highest in Sri Lanka followed by the Philippines. Indonesia's average operating cost

Table 4.1

NET INTEREST MARGINS AS A PER CENT OF TOTAL ASSETS

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	0.67	–	0.75	–	2.26	–	1.22
2. Korea	0.97	2.22	1.00	1.12	0.25	0.55	0.74	1.30
3. Malaysia	–	2.88	–	1.99	–	2.09	–	2.32
4. Philippines	1.16	3.03	3.05	4.23	2.42	3.24	2.21	3.50
5. Sri Lanka	3.43	3.81	1.48	4.58	–	2.67	2.46	3.69
6. Taiwan	1.75	1.15	1.38	0.92	1.30	1.06	1.47	1.04
7. Thailand	2.58	3.96	1.08	3.22	1.50	3.68	1.72	3.62

Table 4.2

GROSS EARNINGS MARGINS AS A PER CENT OF TOTAL ASSETS

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	2.72	–	2.21	–	6.77	–	3.90
2. Korea	4.62	4.03	4.44	3.62	2.07	2.94	3.71	3.53
3. Malaysia	–	3.75	–	2.62	–	3.37	–	3.25
4. Philippines	2.27	5.43	4.42	6.41	5.19	6.29	3.96	6.04
5. Sri Lanka	5.01	6.27	3.53	6.57	–	6.04	4.27	6.29
6. Taiwan	2.15	1.35	1.77	1.16	1.69	1.42	1.87	1.31
7. Thailand	3.18	5.05	1.21	3.75	1.80	4.58	2.06	4.46

was high at 4.07 percent due to the influence of Bank C with a ratio of 7.84 percent. If this bank is excluded, the average falls to 2.19 percent for 1993. Following the same trend as gross earnings margins, the operating costs of the commercial banks in the Philippines and Thailand have increased between the two years suggesting a decline in efficiency. In Sri Lanka while Bank A shows an improvement, the operating cost ratio has doubled in 1993 compared to 1980. This is a clear indication of increasing inefficiency. In Taiwan and Korea (except Bank C), the operating costs have declined indicating improved efficiency in the banking system. On average, the operating costs of Sri Lankan and Philippine commercial banks remained high at 4.4 percent and 3.9 percent of assets respectively in 1993 and represent increases of over 32 percent and 31 percent respectively over 1980.

While Thailand's operating costs too were high and increased by 70 percent between 1980 and 1993, those of Taiwan and Korea had declined from averages of 1.16 percent and 3.13 percent in 1980 to 0.89 percent and 2.65 percent respectively in 1993. The rates of declines were 29 percent and 15 percent respectively for Taiwan and Korea. The average operating costs of Korean commercial banks appear to be even higher than those of Thailand. Taiwan has the lowest operating cost ratios indicating a high degree of efficiency.

Operating costs can be broken down into various costs, such as staff costs, premises and equipment, loan losses and other expenses. For purposes of uniformity and based on the availability of data, we have divided operating costs into two components, namely administrative costs and provision for loan losses as shown in Table 4.4. Administrative costs will include all costs except provision for loan losses. According to the Table, very high administrative costs are incurred by commercial banks in Indonesia, Korea, the Philippines and Sri Lanka. They vary from 30 percent for Bank C in Korea to 55 percent for Bank C in Indonesia. Indonesia has the higher administrative costs, on average, followed by Sri Lanka and the Philippines. Furthermore, the provisions for loan losses and the actual loan losses themselves have been quite high for Indonesia, Korea, Malaysia, Sri Lanka and Thailand, indicating a large volume of non-performing assets and loan losses. Some of these losses may have been due to poor loan management and recovery but they may also be due to loans granted to sectors or institutions under government direction, guarantee, or involvement. In some countries, large amounts of government guaranteed or directed

Table 4.3

OPERATING COSTS AS A PER CENT OF TOTAL ASSETS

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	2.45	–	1.92	–	7.84	–	4.07
2. Korea	4.22	2.81	3.58	2.66	1.61	2.50	3.13	2.65
3. Malaysia	–	2.23	–	2.40	–	1.73	–	2.12
4. Philippines	1.41	3.39	3.07	4.24	4.44	4.07	2.97	3.90
5. Sri Lanka	4.39	4.22	2.29	5.29	–	3.76	3.34	4.42
6. Taiwan	1.42	0.92	1.18	1.06	0.89	0.70	1.16	0.89
7. Thailand	2.26	2.62	0.95	2.49	1.26	2.52	1.49	2.54

Table 4.4

BREAKDOWN OF COSTS (IN PER CENT)

		Bank A		Bank B		Bank C		Average	
		1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	Interest Cost	–	48.60	58.89	38.04	57.47	44.23	58.18	43.62
	Administrative Cost	–	48.26	32.86	52.05	30.76	54.90	31.81	51.74
	Provision for Loan Losses	–	3.13	8.25	9.91	11.76	0.87	10.01	4.64
2. Korea	Interest Cost	69.12	57.69	71.89	59.69	77.00	61.87	72.67	59.75
	Administrative Cost	21.22	35.41	22.75	34.81	16.20	29.83	20.06	33.35
	Provision for Loan Losses	9.66	6.90	5.37	5.49	6.80	8.30	7.28	6.90
3. Malaysia	Interest Cost	–	68.20	–	76.86	–	78.69	–	74.58
	Administrative Cost	–	21.70	–	16.52	–	18.45	–	18.89
	Provision for Loan Losses	–	10.10	–	6.62	–	2.86	–	6.53
4. Philippines	Interest Cost	45.13	81.73	53.52	68.09	52.91	57.75	50.52	69.19
	Administrative Cost	49.11	18.27	44.79	30.74	45.98	38.90	46.63	29.30
	Provision for Loan Losses	5.76	–	1.69	1.16	1.11	−3.35	2.85	−1.10
5. Sri Lanka	Interest Cost	62.14	60.21	64.15	49.23	–	65.29	63.15	58.24
	Administrative Cost	30.89	36.70	28.91	44.96	–	31.89	29.90	37.85
	Provision for Loan Losses	6.97	3.09	6.95	5.81	–	2.82	6.96	3.91
6. Taiwan	Interest Cost	–	–	74.15	76.45	73.91	77.05	74.03	76.75
	Administrative Cost	–	–	21.86	22.06	23.89	22.13	22.88	20.96
	Provision for Loan Losses	–	–	3.99	1.49	2.19	0.83	3.09	6.32
7. Thailand	Interest Cost	78.76	70.78	81.01	75.06	78.63	72.34	79.47	72.73
	Administrative Cost	17.90	20.26	18.58	18.89	18.68	23.74	18.39	20.96
	Provision for Loan Losses	3.35	8.97	0.40	6.06	2.70	3.92	2.15	6.32

loans have become totally unrecoverable incurring large losses to the banks. It is hardly surprising that commercial banks charge higher margins to non-priority sector customers in order to cover these losses.

The operational costs are directly related to the scale of operations or the size of the bank. As the bank employs more financial inputs (sources of funds) and acquires more assets (use of funds), the operational costs will increase due to more requirements of supporting services. For the same size of total assets, banks with more branches have to employ more workers and equipment to staff a larger number of offices, thereby increasing the overall unit cost of their operations. The two dimensions of bank size should therefore be distinguished: the total amount of financial assets and the number of branches it maintains to carry out these financial transactions.

Large shares of non-interest related expenses indicate high costs of financial intermediation. These costs have a direct influence on the level of lending rates as banks try to charge margin over the cost of funds to cover such expenses. We can generally observe that banks with high cost of funds coupled with high intermediation costs have a tendency to increase their fee-based income and make large profits. The banks which make large profit margins generally have high lending rates compared to banks that make low profit margins.

2.4 Net Earnings Margins

As shown in Table 4.5, the net earnings margins are much lower than the gross margin indicating the high operating costs. Philippine commercial banks seem to be enjoying a larger net earnings margin than their counterparts in the other SEACEN countries. The margin has been above 2 percent in 1993 for all Philippine banks surveyed and around or below 1 percent in 1993 for Taiwanese commercial banks. Thailand and Sri Lanka also report relatively high net margins at 1.92 percent and 1.87 percent respectively in 1993. In the Philippines, Sri Lanka and Thailand, the net earnings margins have increased over the years while in Taiwan, they have decreased indicating increased competition. In Korea, two commercial banks report increasing margins, while the third reports a decreasing margin due to a large increase in operating costs. On average, Philippine commercial banks have the highest net earnings margin of 2.14 percent in 1993 while Thailand enjoys the second highest average margin of 1.92 percent. The average

net earnings margin for Korean commercial banks is 0.88 percent while that for Taiwan is 0.42 percent in 1993. The average net earning margin of 2.14 percent for the Philippines is equivalent to 5 times the average margin for Taiwanese banks, and more than twice the average margin for Korea.

2.5 Net Income

Net earnings margins adjusted for income taxes are shown in Table 4.6. It can be seen that the average profit margins are the highest in the Philippines followed by Sri Lanka. In the case of the Philippines, studies have shown that increasing banking concentration has led to larger profit margins for banks. The implication of this argument is that interest rate liberalisation without being accompanied by a liberal bank entry policy would lead to the widening of the bank spread hurting both borrowers and depositors.[8] In Taiwan, the profit margins have declined over the years. In Korea, the profit margin of one bank has increased while the profits of the other two banks have declined slightly between the two years. On average, the Philippines, Sri Lanka, Thailand and Korea show increasing profit margins while Taiwan shows decreasing profit margins. The profit margin of 1.81 percent for the Philippine commercial banks is more than 6 times the profit margins for Taiwanese commercial banks and more than 3 times the profit margins for Korean commercial banks. Tables 4.1 and 4.5 indicate a systematic pattern in which countries with large interest margins and earnings margins also have large profit margins.

The above analysis highlighted a few important points. First, the cost of financial intermediation as measured by the gross earnings margins have been declining in Korea and Taiwan. In all other countries, the cost of financial intermediation has increased indicating greater inefficiency in the banking services. Second, except for Korea and Taiwan and to some extent in Indonesia, many SEACEN countries report somewhat large net interest margins indicating that such margins may have been a consequence of high lending rates. Third, operating costs of commercial banks in many SEACEN countries, except Taiwan

8. Lamberte, Mario B. ***Assessment of the Financial Market Reforms in the Philippines 1980-1992.*** Paper presented at the Third Convention of the East Asian Economic Association held in Seoul, Korea 20-21 August 1992, p. 10.

Table 4.5

NET EARNINGS MARGINS AS A PER CENT OF TOTAL ASSETS

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	0.27	–	0.29	–	−1.07	–	−0.17
2. Korea	0.41	1.22	0.86	0.97	0.46	0.44	0.58	0.88
3. Malaysia	–	1.52	–	0.22	–	1.65	–	1.13
4. Philippines	0.86	2.04	1.35	2.17	0.75	2.21	0.99	2.14
5. Sri Lanka	0.63	2.05	1.25	1.28	–	2.28	0.94	1.87
6. Taiwan	0.72	0.43	0.59	0.10	0.80	0.72	0.70	0.42
7. Thailand	0.92	2.43	0.26	1.26	0.54	2.06	0.57	1.92

Table 4.6

NET INCOME AS A PER CENT OF TOTAL ASSETS

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	0.27	–	0.29	–	−1.07	–	−0.17
2. Korea	0.18	0.77	0.69	0.65	0.39	0.37	0.42	0.60
3. Malaysia	–	0.78	–	0.21	–	1.11	–	0.70
4. Philippines	0.55	1.85	1.36	1.73	0.59	1.86	0.83	1.81
5. Sri Lanka	0.11	2.05	0.57	1.04	–	1.90	0.34	1.66
6. Taiwan	0.36	0.32	0.26	0.01	0.53	0.55	0.38	0.29
7. Thailand	0.62	1.58	0.13	0.78	0.37	1.43	0.37	1.27

and Malaysia, are high and increasing indicating continuing inefficiency in the banking system. High operating costs make the net earnings margin very low. In the case of Bank C in Indonesia, net earnings margins became negative due to extremely high operating costs even though the bank reported very high net interest margin and the highest gross earnings margin. It would be observed that the high gross earnings margin is thus related to banks with very high operating costs. It was also seen that net earnings margin and net income are also very high for banks in the Philippines and Sri Lanka and so are the operating costs of these banks. The countries which have low operating costs also have low levels of net earnings margins and net incomes as evidenced by Korea, Malaysia, Taiwan and Thailand. Thus our sample study indicated that low net margins are associated with more efficient commercial banks and large net margins are associated with rather inefficient banks.

2.6 Profitability

Table 4.7 presents two operating ratios which indicate the profitability of commercial banks. They are Return on Assets (ROA) and Return on Equity (ROE). ROA is defined as the profits after tax as a share of average assets and ROE is defined as the profits after tax as a share of equity capital. The Table shows that generally the banks with relatively high ROA also have high ROE. It can be expected that a bank with a high equity capital will report a high ROA than a bank with a low equity capital. Operating costs and taxation also have a major bearing on the two ratios. For instance, the ROE in Indonesia's Bank C becomes negative due to high operating costs while that of Taiwan's Bank C becomes negative due to large provisions for taxation. Sri Lanka has the highest ROE of 301 percent for Bank C followed by Philippines' Bank A at 145 percent. These very high ROE ratios must be viewed with caution. A possible reason for the high ROE figure is the use of paid-up capital as a proxy for a bank's equity. One can argue that paid-up capital is but a part of bank's equity or owner's risk exposure to the business. Another reason may be the tendency, particularly of the state banks, to overstate profits because of inadequate provisioning for bad and doubtful loans. As such, the actual ROE could be lower than indicated as above. Nevertheless, according to our results, there is a wide variation in operation ratios among the commercial banks and countries, and it would be seen that for many banks, profit ratios are very high even after allowing for inflation.

Table 4.7

RETURN ON ASSETS (ROA) AND RETURN ON EQUITY (ROE) OF COMMERCIAL BANKS IN THE SEACEN COUNTRIES

	RETURN ON ASSETS (ROA)						RETURN ON EQUITY (ROE)					
	Bank A		Bank B		Bank C		Bank A		Bank B		Bank C	
	1980	1993	1980	1993	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	0.27	–	0.18	–	−1.07	–	33.65	–	16.65	–	−78.23
2. Korea	0.18	0.77	0.69	0.65	0.39	0.37	6.32	19.18	16.38	8.27	7.58	5.33
3. Malaysia	–	0.78	–	0.21	–	1.11	–	39.96	–	4.29	–	30.69
4. Philippines	–	3.34	0.55	1.85	1.36	1.73	–	144.61	13.42	26.35	29.17	80.77
5. Sri Lanka	0.11	2.05	–	1.04	–	1.90	4.14	22.96	–	19.85	–	301.42
6. Taiwan	–	–	0.36	0.32	0.26	−0.0001	–	–	61.49	43.06	48.09	−0.83
7. Thailand	0.62	1.58	0.13	0.78	0.37	1.43	16.16	26.58	3.37	15.50	6.10	21.58

2.7 Composition of Income

We noted that banks which have smaller spreads as per our cost of funds calculations have reported very high margins and profits. If cost of funds is high and the actual lending rate is not adequate to cover the cost of funds, let alone administrative expenses, etc., how do banks manage to make such large profits. An answer to this can be found in the composition of income. In view of the high costs in mobilising deposits, generating income from loans alone will not be adequate. Besides, commercial banks engage in fierce competition among themselves to attract customers, offer various services ranging from custodial services to universal banking. For most of the transactions, other than conventional lending, the banks generally charge fees. These fee-based incomes which do not have a direct relationship with the cost of funds have become a major source of income for commercial banks in many countries in recent years.[9]

Table 4.8 gives a breakdown of income into interest income and other income.

2.8 Interest and Non-Interest Income

In Malaysia, Taiwan and Thailand, interest income continues to be the major source of income for commercial banks accounting for over

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9. These can also be called 'off-balance sheet' (OBS) activities. OBS banking refers to those activities of commercial banks that generate income without expanding the asset portion of their standard balance sheet. In many cases, these activities also involve the creation of contingent claims against the banks; hence they are also referred to as contingent accounts. OBS activities typically consist of the following:
   (i) Trade-related guarantees and foreign exchange services which include commercial and standby letters of credit (LCs), spot and future (or forward) exchange commitments and guarantees other than LCs;
   (ii) Fiduciary operations which refer to the banks' trust accounts and managed funds (or funds held under management);
   (iii) Investment banking-related accounts which include government securities held on consignment by banks, government and private securities held under custodian arrangements as part of their quasi-banking functions etc.; and,
   (iv) Payments and safekeeping accounts which consist of bills for collection, and items held for safekeeping and custodianship other than those administered by the trust departments.

   (Adopted from Ma. Socorro V. Zingapan, Mario B. Lamberte, and Josef T. Yap, *Off-Balance Sheet Activities of Commercial Banks in the Philippines,* ***Working Paper Series No. 90-25,*** Philippine Institute for Development Studies (PIDS), Manila, December 1990, pp. 1-2.

Table 4.8

PERCENTAGE SHARE OF INTEREST INCOME AND OTHER INCOME IN TOTAL INCOME

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
INTEREST INCOME								
1. Indonesia	–	59.31	–	70.59	–	61.04	–	63.65
2. Korea	74.00	77.00	74.70	66.90	75.60	65.90	74.77	69.93
3. Malaysia	–	89.83	–	94.11	–	86.84	–	90.26
4. Philippines	87.00	74.30	87.50	80.50	75.30	70.10	83.27	74.97
5. Sri Lanka	87.00	80.38	73.08	85.95	–	74.31	80.04	83.17
6. Taiwan	93.70	95.30	92.30	94.80	88.90	90.40	91.63	93.50
7. Thailand	94.80	90.40	97.50	95.20	95.40	92.00	95.90	92.53
OTHER INCOME								
1. Indonesia	–	40.69	–	29.41	–	38.96	–	36.35
2. Korea	26.00	23.00	25.30	33.10	24.40	34.10	25.23	30.37
3. Malaysia	–	10.17	–	5.89	–	13.16	–	9.74
4. Philippines	13.00	25.70	12.50	19.50	24.70	29.90	16.73	25.03
5. Sri Lanka	13.00	19.62	26.92	14.05	–	25.69	19.96	16.83
6. Taiwan	6.30	4.70	7.70	5.20	11.10	9.60	8.37	6.50
7. Thailand	5.20	9.60	2.50	4.80	4.60	8.00	4.10	7.47

90 percent of total income. In Taiwan in particular, the share of interest income has increased to 94 percent in 1993 compared with 92 percent in 1980. In Thailand, this share has declined marginally but remains above 90 percent. In other countries, particularly Indonesia, Korea, the Philippines and Sri Lanka, the share of non-interest income is very high. In Korea, it was as high as 30 percent in 1993 compared with 25 percent in 1980. In the Philippines, it has increased from 17 percent in 1980 to 25 percent in 1993. In Indonesia, on average, more than 35 percent of total income is derived from non-interest income. Among the commercial banks, Indonesia's Bank A has a non-interest income share of 41 percent in 1993. Thus, in countries where banks find it difficult to make sufficient margins due to high cost of funds and high operating costs, they tend to move towards fee-based activities. Table 4.9 below shows the non-interest income in terms of total assets.

2.9 Fee-Based Income

Commercial banks' desire for 'fee-based' income reflects partly their risk-averse strategy. Since each individual bank has some control over its lending policy by selecting customers whose creditworthiness is consistent with the degree of risk aversion of the bank, the actual yield on total advances largely reflects the attitude towards risk that the management is prepared to take. A conservative bank may generally lend more to relatively low-risk, low-yield customers and earn a lower return on its lending than a more aggressive one. The aggressive one will endeavour to lend more under loans and overdrafts than under bills of exchange or foreign exchange or other 'non-lending' activities. The higher the ratio of loans and advances to total assets, the higher is the risk-taking strategy of the commercial bank. Since the rate of return is higher in loans and overdrafts, the higher the ratio of loans and overdrafts, the higher will be the unit revenue from bank advances. However, a certain degree of risk aversion is shown by the commercial banks in the SEACEN countries, as the revenue from 'fee-based' activities tend to increase over time. A regression study conducted in early 1970s indicated that the volume of foreign exchange operations is positively significantly related to the 'non-allocable' unit revenue on total assets. The branching activity also enhances the opportunity of banks to earn higher income from other sources such as guarantee fees and various types of commissions, according to the same study.[10]

10. Chaipravat Orlan, *op. cit.*, p. 18.

According to Table 4.9, Indonesia, Korea, the Philippines and Sri Lanka earn income equivalent to more than 2 percent of total assets from non-interest-based activities. According to cost of funds calculations, the commercial banks in at least Korea, two banks in the Philippines and one bank in Sri Lanka are unable to cover their costs. However, these banks have made large profits owing to the very high ratios of fee-based incomes. The above ratios can be compared with the margins after cost of funds, as they are all taken as a percent of total assets.

3. Summary and Conclusion

We observed several important points in this Chapter. First, interest margins in some countries are higher than others. Countries with high lending rates have high margins while countries with relatively low lending rates have low margins. Further, in most of the countries, particularly those with high lending rates, the margins have increased over the years. Second, operating costs are also higher in the countries with high lending rates and margins and they are on the increase compared to countries with low lending rates, where the operating costs as a share of total assets are decreasing indicating a high degree of efficiency in the banking system. Further, a breakdown of the operating costs showed that high administrative costs which include mainly staff costs, and high loan losses or provision for such losses have been the main reason for high operating costs. Third, net earnings margins also have a positive correlation with countries with high lending rates despite the high operating costs. They also report very high Returns on Assets (ROA) and Return on Equity (ROE) indicating large profit motives of the banks. The banks with high cost of funds make large profits by engaging largely in fee-based activities. Finally, one can argue that even though the high cost of funds affects the banks badly, causing them to increase the lending rates, there appears to be no strong relationship between the high cost of funds and profitability as these banks make large profits any way irrespective of the level of the cost of funds. The incomes may come from non-interest-based activities but turning towards such activities could be a natural consequence of the high cost of funds.

Table 4.9

NON–INTEREST INCOME AS A SHARE OF TOTAL ASSETS (PER CENT)

	Bank A		Bank B		Bank C		Average	
	1980	1993	1980	1993	1980	1993	1980	1993
1. Indonesia	–	2.05	–	1.46	–	4.51	–	2.67
2. Korea	3.65	1.81	3.43	2.50	1.82	2.39	2.97	2.23
3. Malaysia	–	0.87	–	0.62	–	1.28	–	0.92
4. Philippines	1.11	2.40	1.37	2.18	2.77	3.04	1.75	2.54
5. Sri Lanka	1.58	2.46	2.05	1.98	–	3.37	1.83	2.60
6. Taiwan	0.39	0.20	0.40	0.25	0.39	0.36	0.39	0.27
7. Thailand	0.60	1.09	0.13	0.54	0.29	0.89	0.34	0.84

Chapter 5

SUMMARY AND CONCLUSION

In the preceding two chapters, several factors have been identified as the key elements that determine the lending rates in the SEACEN countries. They can be broadly classified into those that affect the cost of funds and those that affect the margins. It was also noted that the sum of "cost of funds" and the "margins" determined the lending rate, except in cases where banks earn much of the income from activities other than normal lending operations. In fact, the actual lending rate as reported and discussed in this study is somewhat misleading due to the fact that it has only limited impact on the banks' profits. As observed in Chapters 3 and 4, those banks which are found to have negative real spread are making large margins and profits. Therefore, in a situation where banks are turning towards non-interest income sources, the question may even be asked as to whether lending rates matter as much as the attention they receive. One reason for the banks to turn towards fee-based income sources would be the high cost of funds resulting from reserve requirements, forced lending programmes, government borrowing and various taxes, etc., on income from different categories of investments or financial instruments. To commercial banks, this is a hedging strategy whereby they try to cover funding losses. The implication is that if cost of mobilising funds is low, the banks will continue to engage in more conventional lending. But whether the banks will make a change in their investment portfolio in response to a change in the factors that cause cost of funds to rise is hard to determine. However, if the country must encourage more and more productive investments by way of increased conventional lending, then, it is important to pay attention to the level of the lending rates and ways and means of reducing them. A reduction of cost of funds will enable the banks to reduce the lending rate.

We noted that deposit rates are the most important factor in the cost of funds. Further, the bulk of the banks' deposits are in time and savings deposits. Among the two categories, the share of time deposits is larger. The time deposit rates are also higher than other categories of deposits. This makes the cost of funds higher. If on the other hand, the share of demand deposits is higher, with little or no interest on such deposits, it will have a dampening impact on the cost of funds. The policy alternative to consider is whether there is a possibility to reduce deposit rates. This depends on many factors.

First, countries in question may have already liberalised their financial systems and interest rates are market determined. In Indonesia, Korea, Malaysia, the Philippines, Sri Lanka, Singapore, Taiwan and Thailand, the interest rates have been deregulated. Therefore, any intervention in deposit rates will not be possible or desirable. In Nepal, where the rates are managed by the central bank, there is a possibility of considering this option. Second, it is important to bring down inflation rates in countries such as Myanmar, Nepal, the Philippines and Sri Lanka because high deposit rates could be a response to high inflation rates. If a positive real deposit rate of about 2 percent is considered adequate, the best way to bring down the deposit rate as well as the lending rate would be to bring down the inflation rate. It is surprising however, that even when inflation rates were brought down, for instance from double-digit figures to single-digit levels in some countries, neither the deposit rates nor the lending rates followed suit. It will be possible, even in a liberalised environment, for the central bank to request the commercial banks to respond to these changes. In doing so, the monetary policy stance of the central bank which takes into account the growth of credit in the economy and the short-term liquidity in the money markets should be adequately considered. It would also be necessary to narrow the large differences that exist between time deposit rates and savings deposit rates in some countries by bringing the time deposit rates closer to those on savings deposits in order to reflect a more realistic time value of money. This action must be followed by all banks if it were to achieve any success. If deposit rates continue to be high, with more countries starting to liberalise their capital accounts, the commercial banks would be tempted to borrow abroad at lower rates in order to reduce their cost of funds.

In the very short run, such a move will improve liquidity in the market. However, if the banks continue to resort to this source on a regular basis, it may have adverse repercussions on the deposit mobilisation efforts of the banks and that of the country. The central banks may want to take precautions by imposing limits on such borrowing.

Reserve requirements are a common feature and an important instrument of monetary policy in the SEACEN countries. This is also the second most important factor in the determination of the cost of funds. The reserve ratios vary from country to country depending on the monetary policy stance. They range from 2 percent

in Indonesia to 22 percent in the Philippines. Since reserve ratios allow only a fraction of the deposits to be loaned, they act as an implicit tax on financial intermediation. If only a fraction of the deposits can be loaned, naturally the lending rate must be higher than the deposit rate disregarding other costs and margins. Thus the higher the ratio, the greater must be the lending rate to make up for the funding losses and other costs and margins. Even at constant reserve ratios, the impact on lending rates will be higher, the higher the deposit interest rates. Hence the point must be stressed that a change in deposit rates makes a greater impact on the lending rate than a change in reserve ratios. Our results have clearly illustrated this point. An alternative to the change in reserve ratio is the payment of interest on reserves. In some countries, namely Taiwan, interest is paid at 2.4 percent on 60 percent of the reserves. In the Philippines, reserves earn an interest of 4 percent. While a policy of this nature will help ease the pressure on the cost of funds, the liquidity injection to the market by way of interest payments must also be considered.

In most of the countries surveyed, with the exception of Taiwan, the commercial banks are required or forced to lend a certain proportion of their loans to priority sectors at below market rates. These programmes are more prevalent in inflationary economies and in countries that are economically less privileged or have welfare-oriented policies. Some of the programmes may even be politically motivated. Although similar to reserve requirements, an important distinction between SRR and priority loans is that priority loans earn interest albeit lower then the market rates and contribute to meeting the interest costs on deposits. Priority sector lending, therefore, does not increase the cost of funds as much as the non-interest-bearing reserve requirements. In fact, in some SEACEN countries, priority sector lending schemes earn more interest than what is paid on deposits. As a result, as shown in Chapter 3, elimination of priority sector lending has increased the cost of funds. However, what this result does not show is that priority lending schemes have a very low rate of recovery and more often than not, they end up in loan losses and write-offs. When such losses are taken into account, the funding losses incurred by the banks on account of priority lending are much greater than the shares of priority lending and related interest rates seem to imply. Banks would then have to either increase the margins over their cost of funds or turn to 'non-lending' activities. Therefore, the inference that elimination of priority lending increases cost of funds in some countries must be carefully interpreted.

From a resource allocation point of view, it appears that priority lending encourages inefficiency. When a certain amount of funds is earmarked for priority lending at low rates, or part of it goes to 'loan losses', it means that not only the amount of funds available for 'non-priority' sectors becomes less but also acts as a tax on them as a higher interest rate needs to be charged to the non-priority sector in order to make up for the interest income loss or capital loss on priority sector loans. In other words, non-priority sector is taxed and priority sector is subsidised. This cross subsidisation in banking seems unfair both from the banks' point of view as well as from the non-priority sectors borrowers' point of view. With most of the countries liberalising their financial systems and interest rates, the importance of priority lending schemes should diminish. In order to ease the pressure on the cost of funds and the lending rates of commercial banks therefore, it can be suggested that the governments should start scaling down the size of their priority sector and subsidised loans which will have a dampening impact on the lending rate. If lending rates are low, the need to have priority lending schemes will also be low as credit will be available at reasonably low rates. Therefore, the governments will have to take the politically difficult step of reducing the priority sector lending and bring their interest rates close to market rates. It will help borrowers by a lower interest rate or depositors with a higher interest rate or both.

Government borrowing requirements increase the cost of funds for commercial banks. In some countries, commercial banks are required by regulation to participate in the government paper auctions. The interest rates accepted at these auctions are generally lower but may sometimes be equal or higher than the deposit rates, but they are certainly much lower than what they can obtain by lending to non-priority sectors. In some countries, it is a requirement to keep part of the liquid assets in government Treasury bills. Under these circumstances, commercial banks have to make up for the interest income foregone by charging higher rates to other customers. It will be observed that the countries with very high lending rates are also the countries where the government borrowing from the banking sector (through the issue of Treasury bills and other papers) is the highest. Thus, it should be noted that governments play a major role in increasing interest rates in a country. If the governments decide to pay the market rates for their borrowing, it will at least ease the pressure on the cost of funds of commercial banks. The other way to turn the

government borrowing to the bank's advantage is to pay lower interest rates for deposits than what is earned on government paper. In fact, this is the result in many SEACEN countries where government paper pays the highest yields and as a result, one would find that elimination of government borrowing increases the cost of funds of banks.

Large budget deficits require large borrowing from the domestic banks and non-bank sectors mainly through Treasury bills. Yields on these instruments are high representing government borrowing requirements. Since the Treasury bill (TB) rate is the benchmark interest rate in many SEACEN countries, budget deficits have a significant influence on increasing interest rates through the increase in TB rates. Increasing government expenditure financed partly through expansionary sources could lead to inflation. When inflation is high, interest rates will have to be further adjusted upwards to compensate for it. Thus large budget deficits act as vicious circles and cause the interest rates to rise. The governments therefore can assist the financial market by reducing their borrowing. They should instead try to increase revenue and reduce expenditure. They should lure in private foreign capital as has been done in "Asian Tigers" as well as in the fast developing countries like Malaysia, Indonesia and Thailand.

As mentioned above, inflation is another important factor that causes the lending rates to increase. First, with high rates of inflation, lending rates must be adjusted accordingly for banks to maintain at least the same real value of its interest income. Second, with a high degree of uncertainty regarding the level of future inflation, banks tend to concentrate more on very short-term contracts which imply more frequent transactions, more paper work, more personnel requirements and higher costs per loan contract.

The structure of the commercial banking system in many countries is such that a few banks dominate the market in terms of their operations representing an oligopolistic situation. This has several implications for the interest rate structure. If the major banks are privately owned and hold majority of the assets of the banking system, there is a possibility of collusion taking place resulting in higher lending rates. If the state sector banks dominate the banking system, all the inefficiencies of the state sector and its forced-lending programmes will be represented in the lending rates. For instance, where the state banks are over-burdened with the government sector programmes and intervention, and due to high administrative and staff costs, lending rates of

the entire banking industry are likely to be affected by the behaviour of these banks. Even if the foreign and domestic private banks are in a position to lend at lower rates due to their lower cost of funds, they would still lend at the high rates prevailing in the market. This will enable them to collect excessive profits.

The term structure of deposits and loans has an important bearing on the interest rates and spreads. It has been observed that in many countries/banks, there is a mismatch in the portfolios of loans and deposits. Most banks carry large shares of short- and medium-term liabilities. They offer higher interest rates for long-term deposits while charging higher rates for short-term loans. This is a very unhealthy situation and can lead to financial crises. Therefore, banks should try to match their long-term assets with long-term liabilities.

High operating costs are a major cause of high lending rates. Of the operating costs, staff costs, loan losses and various forms of taxations are the crucial factors. While overstaffing, large emoluments and excessive branching may cause staff costs to rise, bureaucratic attitudes, state intervention through priority lending, directed or government guaranteed lending and poor loan recovery and general inefficiency of the bank lead to large loan losses. Further, withholding taxes and various other levies on interest income of individuals and banks are a major cause of high operating costs. All such taxation on financial instruments are best done away with to reduce costs and to promote savings and investment. Therefore, the banks that are saddled with the above problems should undertake some serious restructuring to reduce administrative costs and improve efficiency.

The policy implications of the results as discussed above need to be further examined by each country because it is not possible or advisable to recommend a set of policies that would apply to all countries, nor would it be possible to prescribe sets of policies for each country as circumstances vary from country to country. But the discussion on the costs of funds estimates, operating ratios and profit margins for selected banks and their relationships with the lending rate would prove useful in designing the policies suitable to their respective countries.

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STATUTORY RESERVE REQUIREMENTS

Indonesia

In Indonesia, the reserve requirements are computed on two kinds of deposits: one for rupiah deposits and the other for foreign currency deposits. The minimum reserves for both categories are set at 2 percent of current liabilities. Liquid assets for reserve purposes are cash in vault and demand deposits with Bank Indonesia. The current liabilities in rupiah consist of demand deposits, savings deposits, time deposits and other liabilities less than 24 months. The current liabilities in foreign currency are demand deposits, call money, deposits on call, time deposits, margin deposits, guarantee deposits, borrowings and other liabilities. No interest is paid on required reserves. Reserves are computed on a weekly basis.

Korea

The Bank of Korea (BOK) may propose reserve requirements on the deposit liabilities of banking institutions. The ratios may not exceed 50 percent but in a period of pronounced monetary expansion, the bank may require banking institutions to maintain minimum reserves of more than 50 percent and up to 100 percent against any increase in their deposits.

For computation, the BOK adopts the lagged reserve requirement rules under which reserves are computed on the basis of every 1/2 months' average deposit outstanding during a maintenance period that lags the computation period by 7 days. The maintenance period corresponding to the first half-month computation period falls between the 8th and the 22nd day of the same month and that corresponding to the second-half runs from the 23rd day of the month to the 7th day of the next month.

The required reserves should be held in the form of deposits with the Bank of Korea, but up to 25 percent of these may be held as vault cash. Reserves against deposit liabilities held by banking institutions in the BOK may be used for the settlement of interbank balances. In

case the reserves of banking institutions fall short of the legal requirements computed semi-monthly, a penalty of 1 percent of the amount of the average deficiency during that period shall be paid to the BOK.

As of the end of 1991, the general reserve required ratio was 11.5 percent, while lower ratios of 1 percent to 8 percent were applied to non-residents' deposits, workers' savings accounts and long-term time deposits respectively.

Further, in order to ensure the liquidity of banks, the Office (Ministry of Finance) requires banks to match the maturities of their assets and liabilities in accordance with the General Banking Act. Long-term lending, defined as lending for over one year but less than ten years should be financed by capital subscriptions, the acceptance of deposits with maturities of at least one year, or the issue of debentures and other securities. Banks may not invest an amount equivalent to more than 100 percent of their equity in stocks, bonds and other securities with maturities of over three years. However, this stipulation does not apply to government bonds or to the Monetary Stabilization Bonds issued by the BOK.

Through the statistical reports that the banks file with it, the Office is able to monitor their long-term and short-term lending operations on a monthly basis. The loan-deposit ratio is also considered a useful index in gauging banks' liquidity, and the Office under the management guidance rules requires banks to extend loans only within the amounts of deposits received and to maintain a current asset position equivalent to at least 30 percent of their total deposits. Banks are not allowed to invest in real estate to an amount exceeding 4 percent of their equity capital, even where it is for operational use.

Malaysia

In Malaysia, the statutory reserve requirements as of 1995 were 11.5 percent of eligible liabilities. Eligible liabilities include:

(i) total deposits;
(ii) net amounts due to/due from financial institutions;
(iii) net repurchase agreements; and,
(iv) net amount of Negotiable Certificates of Deposits (NCDs) issued.

Reserves are calculated on a fortnightly basis. Banks are allowed to average the reserves on a daily variation of 50 basis points above or below the required ratio of 11.5 percent is permitted.

Myanmar

In Myanmar, financial institutions are required to maintain the statutory reserve at 10 percent of their demand deposits and 5 percent of their time deposits. Reserves are calculated on a weekly basis.

Nepal

Nepal Rastra Bank (NRB) imposes on banks a cash reserve requirement of 12 percent (4-percent cash in their vault and 8-percent cash balance with NRB) of their total deposits. These reserves do not earn any interest. Reserves are computed weekly. Penalty for shortfall is 0.03 percent per day to 0.10 percent per day depending on the frequency of the shortfall.

Philippines

Legal reserve requirements on peso deposit and deposit substitutes of banks and non-banks for 1993 are as follows:

Legal Reserve Requirements (%)

	Commercial Banks	Thrift Banks	Rural Banks	Non-Banks
Demand	22.0	22.0	22.0	-
Savings	22.0	19.0	14.0	-
NOW Accounts	22.0	22.0	22.0	-
Time Deposits				
< 730 days	22.0	19.0	14.0	-
> 730 days	22.0	19.0	14.0	-
Deposit Substitutes				
< 730 days	22.0	22.0	-	22.0
> 730 days	22.0	22.0	-	22.0

Of the reserve requirement, a minimum of 2 percent may be used to purchase from Bangko Sentral ng Pilipinas market yielding govern-

ment securities. Reserves are computed daily. Excess or deficit is determined weekly. Reserve week has 7 calendar days starting Friday. Deficiencies on some days can be offset by excesses in other days of the week. A penalty is levied on average daily net deficiency during the week. The penalty for deficiency for 4 times during a week for two consecutive weeks is losing privilege of offsetting deficiencies until such time that it maintains daily reserves at the required level for 4 consecutive days.

Singapore

Banks in Singapore have to maintain 6 percent of the liabilities base of banks in interest-free reserves with the Monetary Authority of Singapore. They also have to maintain liquidity reserve ratio of 18 percent of the liabilities base. Reserves are computed daily.

Sri Lanka

In Sri Lanka, all licensed commercial banks are subject to a statutory reserve requirement as follows:

(i) 15 percent of deposit liabilities that are denominated in Sri Lanka currency.
(ii) 5 percent of deposit liabilities that are denominated in foreign currency that are invested outside Sri Lanka.
(iii) 15 percent of deposit liabilities that are denominated in foreign currency but do not come under (ii) above.

Commercial banks do not earn any interest on the reserve with the Central Bank of Sri Lanka (CBSL).

Further, in terms of the Banking Act No. 30 of 1988, the Monetary Board of the CBSL can specify the liquid asset ratio within the range of 20-40 percent of the total liabilities net of liabilities to the CBSL and to the shareholders. At present, all commercial banks are prescribed to maintain a minimum of 20 percent of their total liabilities in liquid assets.

Taiwan

As stated in Article 23 of the Central Bank of China Act, the Central Bank may adjust various deposit reserve ratios within the following limits:

(i) Checking Deposits	15% - 40%
(ii) Demand Deposits	10% - 35%
(iii) Savings Deposits	5% - 20%
(iv) Time Deposits	7% - 25%

The reserve requirement ratios of these deposits as of 1995 are as follows:

(i) Checking Accounts	25.25%
(ii) Passbook Deposits	23.25%
(iii) Passbook Savings Deposits	15.75%
(iv) Time Savings Deposits	7.625%
(v) Time Deposit	9.625%

Of the required reserves, they can take the form of either deposits placed at the Central Bank of China (CBC) or vault cash, with one restriction that deposits placed at the CBC should account for more than 60 percent of the reserve requirements. Further, 60 percent of the required reserve which take the form of deposits placed at the CBC earn interest of 2.4 percent per annum. However, other deposits placed at the CBC earn no interest.

Also liquidity assets of banks are required to meet the liquidity ratio, currently at 7 percent set by the CBC. Liquid assets include excess reserves, net due from banks, Treasury bills, net holdings of negotiable certificates of deposit, bankers' acceptances, commercial paper guaranteed by banks' or bills of finance companies, government bonds, corporate bonds, bank debentures, and other securities approved by the CBC. (Reserve computation period extends from the first day to the last day of each month. Maintenance period lags 3 days behind.)

Thailand

The financial institutions under the supervision of the Bank of Thailand (i.e., commercial banks, finance companies, credit foncier companies) are subject to liquidity assets requirement as follows:

(i) Commercial Banks: Not less than 7 percent of total deposits. The specified assets are as follows:
- Deposit with the Bank of Thailand (BOT) (with no interest): No less than 2 percent of total deposits.
- Cash in hand: No more than 2.5 percent of total deposits.

- Other securities (Thai government securities, state enterprises' securities approved by the BOT, the BOT bonds, securities guaranteed by the Ministry of Finance with interest due to commercial banks).

The requirement is calculated on a bi-monthly lagging basis.

(ii) Finance Companies Not less than 7 percent of total borrowing from the public (i.e., promissory notes issued). The specified assets are as follows:
- Deposits with BOT (with no interest): Not less than 0.5 percent of total borrowing from the public.
- Unobligated deposits with banks located in Thailand.
- Lending on demand to banks located in Thailand.
- Unobligated Negotiable Certificates of Deposits issued by commecial banks.
- Other securities (government securities, securities issued by state enterprises established by special laws, securities guaranteed by the Ministry of Finance).

Not less than 5.5 percent of total borrowing from the public (with interest due to finance companies). The requirement is calculated on a weekly lagging basis.

(iii) Credit Foncier Companies: Not less than 7 percent of total borrowing. The specified asset is as follows:
- Deposits with BOT (with no interest): Not less than 0.5 percent of total borrowing.
- Unobligated deposit with banks located in Thailand.
- Lending on demand to banks located in Thailand.
- Other securities (government securities, securities issued by state enterprises established by special laws, securities guaranteed by the Ministry of Finance): Not less than 3.5 percent of total borrowing (with interest due to credit foncier companies).

The requirement is calculated on a weekly lagging basis. The reserve week starts on Friday and ends on Thursday of the following week.

PRIORITY SECTOR CREDIT SCHEMES

Indonesia

In Indonesia, the Small-Scale Business Credit Scheme (KUK) has been created to support the small-scale business (owing maximum total assets of Rp. 600 million or equivalent of US$ 300,000). Under this scheme, a national bank must channel to this sector not less than 20 percent of total credit extended. The minimum KUK limit is based on the combined calculation for all offices of the bank concerned.

To facilitate the fulfilment of the provision, a bank may channel KUK funds in cooperation with other banks or financial institutions. There are certain KUK regulations:

- The KUK ceiling is equivalent to US$ 125,000/- per customer.
- Credit of up to US$ 12,500/- equivalent shall be counted as KUK by easing criteria for use.
- It is possible for KUK money market securities to be traded by banks exceeding their required KUK to banks falling short of this requirement. The purchase of KUK money market securities shall be recognised as fulfilment of the KUK requirement.

The failure of a bank to achieve a KUK ratio of 20 percent shall comprise a minus factor and achievement of a KUK ratio of 20 percent by a bank shall comprise a plus factor in rating. The total credit extended to KUL in 1980 stood at Rp. 14 billion. This amount had almost doubled to Rp. 27.8 billion in 1993.

Korea

The Government of Korea has intervened extensively in the financial system and the main vehicle which is used to direct resources to the priority sector is through policy loans. At the end of 1991, total policy loans accounted for 39.7 percent of total domestic credit and the assets of the Korea Development Bank (KDB) and Korea Export Import Bank (KEXIM). The share of policy loans during 1986-1991 had averaged 42.7 percent. By any standards, the amount and proportion of

policy loans in Korea is very high. The size of the policy loans is substantially more for the discount loans provided by the BOK. At the end of 1991, such loans from the BOK rediscount window amounted to about Won 13.5 trillion. The total cost of providing such policy loans in 1991 amounted to Won 2.3 trillion, or 1.1 percent of GNP.

Malaysia

Priority sectors are looked after through the implementation of the lending guidelines. Under the 1992 Guidelines, commercial banks and finance companies were required to extend a minimum of 20 percent to their total loans outstanding as at end-December 1991 to the Bumiputra community within 2 years. For housing, the commercial banks were required to lend for owner-occupied houses costing RM 100,000 or less for at least 75,000 units with total commitment value of RM 4.5 billion. For finance companies, the requirement is 25,000 units with commitment value fixed at RM 1.5 billion. The maximum interest rate should be 9 percent or 1.75 percent over the declared lending rate, whichever is lower. When interest rates increased, the Ministry of Finance provides an interest subsidy. Further, commercial banks are required to provide loans to small enterprises under the Principal Guarantee Scheme (PGS) and Credit Guarantee Corporation (CGC) with little or no collateral. Fifty percent of credit should go to the Bumiputra community.

Myanmar

All major banks are state-owned. Priority sector and directed lending is widespread.

Nepal

In Nepal, under the priority sector credit scheme initiated by the Central Bank, the commercial banks were required to extend credit to the tune of at least 10 percent of their deposits to the priority sectors in 1981. In 1986, the priority sector credit requirement was changed to 8 percent of total credit. It was later increased to 12 percent in 1989. By 1993, NRB had introduced a number of such credit schemes keeping in line with government policy. Furthermore, besides the 12 percent of total loans allocated to priority sector, the banks are required to extend up to 3 percent of their total lending to deprived sections of the society.

Philippines

Commercial banks are required to lend at least 10 percent of loanable funds to agriculture and agrarian reform programme beneficiaries (agri-agra) or purchase certain allowable government securities. Small and medium industries (SMIs) should also be provided a minimum of 10 percent at below market rates. These loans are disbursed through non-governmental organisations (NGOs). The banks can invest funds in BAP-SME Credit Fund in lieu of SMI lending.

Singapore

No priority lending programmes.

Sri Lanka

In Sri Lanka, the CBSL implements credit guarantee schemes for Small- and Medium-Scale Industries (SMIs), the Bus Purchase Loan (BPL) and the Entrepreneur Development Programme and Refinance Scheme for Low Income Housing under the United States Agency for International Development (USAID), Housing Guarantees (HGLISP) Phase IV. In addition, the CBSL acts as the credit executing agency for several foreign funded projects in the agriculture and the rural sector. Refinance facilities provided to priority sectors have now been phased out.

Taiwan

In order to foster economic restructuring and upgrading, the Central Bank of China provides various forms of accommodation to commercial banks. At the end of 1992, the net outstanding balance of the different forms of accommodation to banks after deducting the allowance for double accounts, stood at NT$ 203.4 billion, which accounts for less than 3 percent of the loans and discounts of all financial institutions in Taiwan. There are no central bank or government regulations which require banks to invest certain minimums in specified papers or activities.

Thailand

In Thailand, refinance facilities have been established to give financial assistance to priority sectors through commercial banks. Under

this scheme, commercial banks may refinance part of qualified loans, currently 50 percent, with the Bank of Thailand at low interest rates (3-5 percent). Commercial banks in turn face interest ceiling on these refinance loans (currently 10.00-11.25 percent).